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ABSTRACT

A post-baccalaureate reverse transfer student is a community college student who has completed a baccalaureate or higher degree prior to enrolling in a community college. This study was conducted to better understand post-baccalaureate reverse transfer students who enroll in community college degree or certificate programs; it sought to investigate the factors that influence these students' decisions and the types of career guidance that these students utilize. Survey packets were mailed to 656 reverse transfer students at 6 Illinois community colleges; 329 (50%) surveys were returned and 221 were usable for data analysis. Overall, the study found that post-baccalaureate reverse transfer students were typically male, white, 38 years old, and married. After obtaining their baccalaureate degrees, they usually waited 11 years before enrolling full time in the community college degree or certificate programs, and they were likely to make such decisions for employment-related reasons. These students were most often found in computer-related and health service-related programs, and their career guidance sources were most often friends and family members. It was also found that within this group of students, a significantly higher number of females enrolled in health service programs while a higher number of males enrolled in applied technology programs. (Contains 71 references.) (GC)

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THE NATURE AND CHARACTERISTICS OF POST-BACCALAUREATE REVERSE TRANSFER STUDENTS AND THEIR UTILIZATION OF CAREER GUIDANCE

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A Dissertation
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Philosophy Degree

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Department of Workforce Education and Development
in the Graduate School
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June 29, 2000

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be accepted in partial fulfillment of the requirements for the

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AN ABSTRACT OF THE DISSERTATION OF

DIANNA LYNN REUSCH, for the Doctor of Philosophy degree in Workforce Education and Development, presented June 29, 2000, at Southern Illinois University Carbondale.

TITLE: THE NATURE AND CHARACTERISTICS OF POST-BACCALAUREATE REVERSE TRANSFER STUDENTS AND THEIR UTILIZATION OF CAREER GUIDANCE

MAJOR PROFESSOR: Dr. Marcia A. Anderson

The post-baccalaureate reverse transfer student (PBRTS) is one who has completed a baccalaureate or higher degree prior to enrolling in a community college. This study focused specifically on those PBRTS who were enrolled in a community college degree or certificate program. Very little research has been conducted on this population, and no research was found regarding their use of career guidance resources.

The purpose of this study was to contribute to a better understanding of post-baccalaureate reverse transfer students. More specifically, the study investigated career guidance utilization as well as factors that influenced PBRTS to enroll in a community college degree or certificate program. Because of the lack of research regarding this population, demographic data were also obtained. The sample for this study contained PBRTS enrolled in six Illinois community colleges.

Useable responses from 221 respondents were analyzed. Demographic data showed that the typical post-baccalaureate reverse transfer student was a married male Caucasian who was 38.5 years of age and enrolled full-time in a community college degree or certificate program. The study found that the 2.1% of PBRTS enrolled in the

six Illinois community colleges surveyed was much lower than percentages in similar studies.

Employment-related reasons were most often cited by PBRTS for enrolling in a community college degree or certificate program. The career guidance resource found to be most important by post-baccalaureate reverse transfer students both before entering college for the first time and before enrolling in the current program of study was "family and friends."

Chi-square tests revealed a statistically significant higher number of females enrolled in Health Service programs and a statistically significant higher number of males enrolled in Applied Technology programs in community colleges.

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CHAPTER 1

INTRODUCTION

Nature of the Study

Historically, the pressure to go to college has been fueled in the United States by issues of status and class. Most people who pressed youth to go to college had good intentions and did so for sound economic reasons. To a certain degree, however, these beliefs were based on misconceptions or misinformation about future labor market opportunities (Gray & Herr, 1995). "Simply getting a college degree, regardless of major, will not be all that helpful for those entering the twenty-first century workplace. The specific field of study matters a great deal—far more than simply getting a diploma" (Judy & D'Amico, 1997, p. 69).

The Bureau of Labor Statistics (BLS) forecast that, through the year 2005, one in three college graduates would not find college-level employment (Gray & Herr, 1995). According to BLS forecasts, four-year colleges will graduate 300,000 to 400,000 more students without a proportionate increase in college-level jobs through the year 2005 (Hecker, 1992). These estimates were conservative and did not take into consideration movement into the U.S. by college graduates from abroad and competition for business that creates jobs for technical workers, among other things. The actual supply of college graduates may exceed the demand for their services to an even greater extent than conveyed by U.S. Bureau of Labor projections (Gray & Herr, 1995).

In a national survey of employers in the 13 largest industrial sectors, "10 of 13 industry groups ranked the need for vocational training higher than the need for a college

degree" (Stern, 1992, p. 1). This finding confirmed the importance of skill, not degrees, in the hiring decisions made by firms. The best source of future high-skill work will be the growing technical workforce, and the majority of these occupations do not require a four-year college degree. According to Gray and Herr (1995), the key to economic security is obtaining occupational skills, not a four-year college degree. "Workers with less education, but who are employed in jobs that require special skills or training, earn as much as [four-year] college graduates who do not require [skills] training to get their jobs" (Eck, 1993, p. 37).

The phenomenon of reverse transfer--the student at a four-year college transferring to a community college has been reported in the literature since Clark (1960) first recognized this group. Renkiewicz, Hirsch, Drummond, and Mitchell (1982) identified five subgroups of community college students: (a) completer reverse transfers (students who had graduated from a four-year college and enrolled subsequently at a community college); (b) four-year noncompleters (students who had previously attended a four-year institution, but did not graduate, and enrolled, subsequently, at a community college); (c) students who had graduated with a two-year degree but had no four-year college experience; (d) two-year lateral transfer students (students who transferred from one community college to another community college); and (e) students attending a college for the first time. Students in the first two of these subgroups are considered reverse transfers.

Reverse transfers comprise one of the fastest growing groups of students in postsecondary education. Some two-year postsecondary higher education institutions

reported that, in certain programs, reverse transfers represented the majority of their students (Gray & Herr, 1995).

Many four-year college graduates are enrolling in community colleges because they are seeking to gain employability skills. Why would someone with a bachelor's or advanced degree spend additional time and money on a lesser degree when doing so seems illogical (Quinley & Quinley, 1997)? One reason might be that the skills learned in associate degree programs in the technologies are required in many high-skill/high-wage occupations (Gray & Herr, 1995).

One should make note of the specific technical programs in which the two-year-program reverse transfers enroll--for example, occupation-specific technical programs in fields such as medical technologies, electronics, and automated manufacturing. These students have discovered that there are ways to succeed other than holding the traditional baccalaureate degree (Gray, 1995). Quinley and Quinley (1998) found technical-related majors such as computer science, engineering, and paralegal had the highest concentration of interest while health-related areas ranked second.

Another example was Northern Virginia Community College where about 15% of the 60,000 students have earned at least a bachelor's degree. Dr. Richard J. Ernst, president of the College said, "A lot of these folks are coming back to gain computer skills. Many of them are trying to turn an English degree into something that would allow them to work in the high-tech industries" (Gose, 1997, p. A33).

It is unclear how many post-baccalaureate reverse transfer students (PBRTS) are taking classes at community colleges. The American Association of Community Colleges (AACC) has no hard data, but it estimated that 10% to 20% of students at community

colleges have at least a bachelor's degree. Quinley and Quinley (1998) reported that the population of post-baccalaureate reverse transfer students is substantial and appears to have stabilized at about 10% of all credit students. Study of this recent trend—four-year college graduates enrolling in community colleges—has been limited (Quinley & Quinley, 1997).

According to Gose, (1997, p. A33), a president of AACC said, "The economy continues to change, and the nature of jobs and work continues to change. All of that drives home the importance of lifelong learning." According to Scot Spicer of Glendale [California] Community College's Research and Planning Unit, "The explosion of certificates shows it's specialized skills that get you a job" (McFarlane, n.d., p. 2).

Purpose of the Study

The purpose of the study was to contribute to a better understanding of post-baccalaureate reverse transfer students (PBRTS). More specifically, the study investigated career guidance utilization as well as factors that influenced PBRTS to enroll in a community college degree or certificate program. This information can be useful to individuals involved in career guidance and counseling, as it will provide data regarding those services that are most often utilized. This information will also help community college administrators better understand the post-baccalaureate reverse transfer students' motivation for enrolling in the community colleges, thereby providing the opportunity to plan curricula and support services more closely designed to meet the students' needs.

Statement of the Problem

The problem of this research was: What factors influenced post-baccalaureate reverse transfer students to enroll in a community college degree or certificate program, and what types of career guidance have these students utilized?

Research Questions

1. What factors influenced post-baccalaureate reverse transfer students to enroll in community college degree and certificate programs?

2. What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in college for the first time?

3. What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in a community college degree or certificate program after having a baccalaureate or higher degree?

4. Was there a greater-than-chance association between the following demographic factors and the type of program in which post-baccalaureate reverse transfer students were enrolled?

   a. age

   b. marital status

   c. ethnic origin

   d. gender

   e. high school focus

Delimitation/Assumption

This study was delimited to 671 students enrolled during the Fall 1999 Semester in selected Illinois community colleges. It was assumed that students were critical and objective in responding to questions regarding their educational and career choices.

The generalizability of the results of this study is limited due to limited accurate data. There is a lack of consistency for identifying post-baccalaureate reverse transfer students in Illinois community colleges.

Definition of Terms

For the purpose of this study, the following definitions were used:

College-Level Employment: Employment which requires a college degree or equivalent.

Employment Satisfaction: Level of satisfaction with employment prior to enrolling in the community college.

Factor: One that actively contributes to the production of a result (Merriam-Webster, n.d.).

Non College-Job: Employment that does not require a college degree or equivalent.

Post-Baccalaureate Reverse Transfer Student (PBRTS): A reverse transfer student who holds a baccalaureate or higher degree; also known as completer reverse transfer.

Program: Associate degree or certificate program offered at the community college.

Reverse Transfer Student: A community college student who was enrolled at a baccalaureate degree-granting institution prior to enrolling at a community college.

CHAPTER 2

REVIEW OF LITERATURE AND RESEARCH

Introduction

The problem of the research was to determine what factors influenced post-baccalaureate reverse transfer students to enroll in community college degree or certificate programs, and what types of career guidance these students utilized.

This literature and research review is presented in four sections summarizing: (a) the American economy's influence on employment, (b) education for employment, (c) career guidance, and (d) the reverse transfer phenomenon.

The American Economy's Influence on Employment

> Work is the creation of material goods or services, which may be directly consumed by the worker or sold to someone else. Work thus includes not only paid labor but also self-employed labor and unpaid labor, including that of homemakers. It provides material and personal benefits but it can also be a source of frustration and aggravation. (Hodson & Sullivan, 1995, p. 3)

Throughout America=s history, this basic definition of work has remained constant; but the world of work has undergone dramatic changes. An examination of historical events that helped form our nation's economy, educational practices, and the career guidance system will provide the basis for a better understanding of the role of work and the importance of informed career choices in today's world.

As the American economy evolved, major changes occurred in workers'

occupational opportunities. New careers came into being because changes in the economy precipitated changes in the workplace. Conversely, many long-established occupations faded or disappeared. As occupations evolved and changed, the need for an educational system that could prepare workers to meet the needs of the changing workplace increased. As more occupational choices became available, career guidance became essential to workers of all ages and in all stages of life.

According to Ginzberg (1975), there were three broad occupational developments in the first half of the 20th Century: (a) advances in technology generated new occupations; (b) the economy had the ability to absorb an increased number of educated people; and (c) large increases in office workers, workers in commercial services, and hospital workers reflected the rising flow of paperwork, the transfer of services from home to market, and the growth of the health industry.

There have been broad changes in conditions of employment since the beginning of World War II: reduction of work hours, significant increases in real earnings, improvement of the work environment, more job security, less discrimination against women and minorities, less pressure on workers to conform to arbitrary demands of supervisors, and a higher proportion of white-collar workers in the workforce (Ginzberg, 1975).

The American workforce also changed. During the 1950s, the number of workers providing services surpassed the number producing goods. In 1956 the majority of U.S. workers had white-collar rather than blue-collar jobs for the first time. The increased demand for single-family homes and the ownership of cars led to the migration of Americans to the suburbs. Technological innovations such as air conditioning spurred the

development of Sun Belt cities. Federally sponsored highways were created, and business patterns began to change. With greater access to the suburbs, shopping centers multiplied, and many industries left the cities for the less-crowded suburbs. Adversely, farmers faced tough times; and finding it difficult to compete, many farmers left the land (USIA, 1991).

Technological advances, especially in the field of automation, increased profits and productivity. There was, however, a decline in the industrial workforce because more goods were produced with fewer workers in the steel, automobile, and aircraft industries (Berkin, Miller, Cherny, & Gormly, 1995). This decline led to shifts in occupational choices.

There were many new business and employment opportunities, especially in the communications and electronics fields. Technological developments such as miniaturization, satellite transmission, the videocassette recorder (VCR), and computers, have affected almost every segment of American society—offices, homes, and schools. In 1980, the development of Microsoft DOS (MS-DOS) facilitated the growth of the personal computing field. This led to restructuring of the process of handling information and offered new opportunities for nearly everyone (Berkin et al., 1995).

The country seemed ready for a change, and, in 1992, Bill Clinton was elected President with the promise to implement changes. The North American Free Trade Agreement was approved in 1993 and eliminated most tariffs and other trade barriers between the United States, Canada, and Mexico (Berkin et al., 1995). The 21st Century will see the world transformed from separate national economies into a global economy. A nation's ability to compete in this economy will depend on the quality of that nation's workforce.

What does the future economy hold? In 1900, 35% of Americans worked on farms and about 30% in the service sector. At the end of the century, 2% of Americans were in farming and about 75%, in the service sector. That may give a strong indication of where the country has gone (Jennings, 1999).

In the 20th Century, Henry Ford's assembly line revolutionized the workplace and created millions of jobs for factory workers. In the 21st Century, the Internet may have the same revolutionary impact. Every new job will be affected, regardless of the industry. Jobs will use computer devices to interface with the networks. Those with the skills to service computer networks will be in great demand. Competition for Web site developers, for computer programmers, and for cellular telephone engineers will continue to be fierce. Nearly 2 million high-tech jobs will be created over the next five years. Another trend, the aging of the population, means more jobs for home healthcare workers and nurses, which are already in short supply. The demand for teachers will also be high, as children of baby boomers continue to crowd America's schools.

The Internet will also be a major factor in job losses in the 21st Century. Retailers, bank tellers, stockbrokers, and travel agents are already being displaced by on-line services. New careers to pursue may be cybrarians to replace librarians and information navigators to replace data managers (Jennings, 1999).

Two qualities give an unprecedented character to the roads ahead into the 21st Century: (a) age, gender, and race barriers to employment opportunity have broken down and (b) more individuals are acting as free agents rather than relying on unions, large corporations, and government bureaucracies on their journeys through the labor force.

For all workers, education, flexibility, and foresight have never been more important than they will be in the years ahead (Judy & D'Amico, 1997).

Many forces cause workers to compete as individuals and contend with ever-changing knowledge and skill requirements. Four of these forces, in particular, are: (a) the pace of technological change in today's economy has never been greater, (b) the rest of the world needs to be considered when looking at the U.S. economy or the characteristics of the U.S. labor force, (c) America is getting older, and (d) the U.S. labor force continues its ethnic diversification (Judy & D'Amico, 1997).

Education for Employment

As the U.S. economy evolved and workplace needs with it, career opportunities changed. The educational system took on the responsibility of providing career guidance and workforce preparation. Some would say the educational system kept pace; others would disagree.

The changing workforce and economy of the U.S. will require adults to learn new skills while possibly changing jobs and careers several times throughout their working lives. Bureau of Labor Statistics (BLS) data on employment from 1960 to 1990 documented the decrease of employment in the goods production industry while service production employment rose. It was predicted that job growth in the 21st Century would come from services, high technology, and the information industry (Jones, 1987-1988).

At the turn of the 20th Century, the median education level of white males was eighth grade, and high school graduation was rare (Kroch & Sjoblom as cited in National Library, 1999). By 1920, 22% of those between the ages of 25 and 29 were high school

graduates; and by 1940, 38% of the same age group had graduated high school (National Library, 1999). The American public had become more educated by the beginning of World War II, with more than 5% of persons aged 25 to 29 having college degrees. Instead of discontinuing education after elementary school as had been the custom, most people joining the labor force had acquired high school diplomas (Ginzberg, 1975). The trend was clear: between 1900 and 1930, the regional, ethnic, racial, sexual, and class differences in length of school attendance narrowed considerably (Grubb & Lazerson, 1982). By mid-century, 53% of people age 25-29 were high school graduates; but only 8% were college graduates (Snyder et al. as cited in National Library, 1999).

During the 1960s, the supply of educated persons increased dramatically. As the post World War II generation graduated high school, their parents recognized that the most desirable jobs required a higher degree. These parents encouraged and helped their children continue their educations (Ginzberg, 1979). Community colleges underwent rapid expansion, and enrollment increased about 200% in the 1960s (Ginzberg, 1975).

By the 1970s, there was also a substantial increase in the years of schooling that new workers had attained. Economic returns from the educational investment remained high, but some of the better-educated new workers were not successful in finding or holding jobs proportionate to their education (Ginzberg, 1975).

There was a marked increase in the proportion of college graduates in non-college jobs in the 1970s and into the 1980s, except among older women. There was no additional increase after the mid-80s, except among older men. By the mid-1990s, the proportions had not returned to the 1970s levels, though the rates for younger men and

women tended to decline (Hecker, 1992; Tyler et al., 1995; Pryor & Schaffer, 1997 as cited in National Library, 1999).

The labor market, however, continued to confirm the need for a college education. There seemed to be no limit to the need for trained manpower. According to Ginzberg (1979), there are several explanations for this phenomenon: (a) the professionalization of personnel divisions, which were headed by college graduates, led them to recruit other college graduates; (b) a college degree was an inexpensive way to determine whether a person had the diligence and discipline to advance his/her goals; (c) modern business was becoming more technical and specialized, creating an increasing demand for scientifically-oriented and management-trained individuals; (d) if the nation's largest companies hired college graduates, other companies tended to follow their lead; and (e) it seemed sensible to hire a relatively large number of college graduates.

By the end of the 1970s, the number of young people seeking admission to college was lower because of rising costs, a less-than-promising job market, elimination of the military draft, and an unwillingness of schools to accept graduate students far in excess of the numbers that could be placed. College and graduate students moved into vocationally-oriented majors to enhance their prospects of satisfactory employment. With a large supply of graduates from colleges and graduate schools, employers upped their hiring criteria, hiring better-educated persons for positions that had been filled with non-graduates. Graduates, in turn, were compelled to accept positions with less challenge and less pay than they had anticipated obtaining (Ginzberg, 1979).

The supply of college graduates increased markedly in the late 1980s and 1990s. Between 1988 and 1994, the number of bachelor's degrees conferred annually by four-

year institutions increased 18%, while the population of 20-24 year olds decreased 6% (National Library, 1999). Some researchers believed that there was too much emphasis on enrolling in four-year colleges. Former Labor Department Secretary, Robert Reich argued, "too many families cling to the mythology that their child can be a success only if he or she has a college degree" (Stanfield as cited in National Library, 1999, p. 3).

In Stanfield's (as cited in National Library, 1999, p. 3) words, "hundreds of thousands of young Americans will embark on college educations--only to find frustration, failure, lots of debt, and the need . . . to learn something practical at a place without ivy." Harwood (as cited in National Library, 1999) contended, "Community colleges . . . have a big role to play in the upgrading of the labor force" (p. 3). The demand for skills that can be obtained through a two-year degree or certificate program is growing rapidly. "Efforts to expand community colleges make more sense than the overemphasis on four-year college degrees for every child . . . '" (Stark et al. as cited in National Library, 1999, p. 3).

The National Center for Education Statistics has been collecting data since 1976 from new college graduates on their experiences in the first year after finishing college. In four repeated surveys, the graduates were asked if their current jobs required college-level skills. In 1976, 24% of new college graduates said their current jobs required college-level skills; in 1985, 37%; in 1991, 44%; and in 1994, 43.2% of new college graduates said their current jobs required college-level skills (Borinsky, Korb, Calahan et al.; McCormick et al. as cited in National Library, 1999). It should be noted, however, that the job market for young college graduates is volatile and different from the market for older graduates.

As research indicates, economic changes and workforce trends impact adults as learners. The rapid change in our society and its ensuing impact on education is summarized as follows:

> What people know when they complete formal schooling is not nearly as important as what they are capable of learning. No education, no matter how brilliantly conceived and delivered, will last a lifetime. That not so simple fact of our times has two ramifications. One is that people will have to continue to learn throughout their lives – to become lifelong learners. Admittedly, that is not exactly a new idea, but it has become, in a very short period of time, a well-accepted notion everywhere . . . [Secondly] That is that the storage of information in the human mind has become a futile activity; the computer will beat us every time . . . . In short, learning must be regarded as a process rather than a product. (Cross, 1988, p. 4-5)

Education Reform

"A Nation at Risk" launched the first wave of education reform. The focus of this reform movement was on excellence. More than 700 statutes stipulating what should be taught, when it should be taught, how it should be taught, and by whom it should be taught were enacted between 1983 and 1985 (Futrell, 1989). Reform was being mandated from the legislature.

It took only a couple of years to realize that if education was to be the tool for social and economic revitalization, educators, rather than legislators, needed to lead the reform. The reform movement was in need of reform. The second wave of education

reform tried to end educational change imposed from legislators and reform from the grassroots—from local schools, local educators, and local communities—became the focus. During this period, equity was put alongside excellence in discussions of education reform (Futrell, 1989).

The U.S. economy became the focus of the third wave of the education reform movement. "Schools needed to produce graduates who could staff American business and industry and reassert this nation's economic preeminence" (Futrell, 1989, p. 12). It became clear that the business community and the education community had to work together more closely and more cooperatively.

The fourth wave of the education reform movement began around 1990 and is an ongoing process. It envisions both excellence and equity in schools, enabling every student—regardless of race, sex, or socioeconomic status—to reach his or her full potential. In an effort to ensure equality in education and, ultimately, workforce preparation, many initiatives were set forth in the last decade of the 20th Century (Futrell, 1989).

Initiatives

The Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) was asked to investigate the demands of the workplace and to determine whether the nation's young people were able to meet those demands. The report to the Secretary of Labor emphasized that the workplace is changing, and good jobs of the future will depend on people who can put knowledge to work. The demands for computational, language, and reasoning skills are increasing in both the high-skill and the very low-skill occupations.

The Goals 2000 Act (1994) resulted in national education goals being made federal law for the first time in the nation's history. Goal 6, Adult Literacy and Lifelong Learning, specifically addressed the need for every adult American to "possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship" ("Summary of the Goals 2000 Act," 1994, p. 2). Two objectives of Goal 6 were: (a) every major American business will be involved in strengthening the connection between education and work, and (b) all workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs ("Summary of Goals 2000 Act," 1994).

The School-to-Work Opportunities Act (STWOA, 1994) was initiated in response to the Clinton Administration's effort to foster the development of a school-to-work system that would address the nation's serious skills shortage. Cooperation between the U.S. Departments of Education and Labor made this legislation possible, and it was authorized through 1999. The School-to-Work Opportunities Act represented the effort toward the development of an educational system that matched students' educational attainment and corresponding skills more closely to job opportunities. It also reinforced the need to prepare students with high levels of technical skills and related academic competencies.

The three components of the School-to-Work Opportunities Act included work-based learning that provided job training or work experiences; school-based learning that includes career counseling, instruction in a career major, and a program of study based on

high academic and skill standards; and connecting activities to assure that the school- and work-based components of the program work smoothly together to achieve the desired objectives of the STWOA ("School to Work Opportunities Act, Overview," 1994).

The Workforce Investment Act of 1998 provided the framework for a unique national workforce preparation and employment system designed to meet the needs of the nation's businesses as well as the needs of job seekers and those who want to further their careers. Title I of the legislation included the following elements:

1. Training and employment programs must be designed and managed at the local level—where the needs of businesses and individuals are best understood.
2. Customers must be able to conveniently access the employment, education, training, and information services they need at a single location in their neighborhoods.
3. Customers should have choices in deciding the training program that best fits their needs and the organizations that will provide that service. They should have control over their own career development.
4. Customers have a right to information about how well training providers succeed in preparing people for jobs. Training providers will provide information on their success rates.

Businesses provide information, leadership, and play an active role in ensuring that the system prepares people for current and future jobs. (Employment and Training Administration, 1998, p. 1)

Career Guidance

A look at the evolution of vocational guidance in America will aid in understanding the marriage of the American economy, educational system, and changing career opportunities. The linking of these three have increased the importance of career guidance as the evolution in the workplace occurs.

At the turn of the century, there was no scientific basis for vocational guidance, as it is known today. There was no Dictionary of Occupational Titles, Occupational Outlook Handbook, or classification system to describe the American occupational structure. There was a basic awareness of individual differences, and the beginnings of aptitude or performance testing existed. Palmistry, phrenology, and physiognomy were widely-used methods to obtain insights into one's future (Rosengarten, 1936). Even though there was some vocational guidance in the schools in the late 1800s, most services of this type were given by philanthropic organizations, settlement houses, the Young Men's Christian Association (YMCA), and private "vocational bureaus" (Herr & Cramer, 1992).

For the first 50 years of the 20th Century, vocational guidance was concerned with predicting occupational choice or occupational success from an individual's test scores prior to entry into the labor market. Vocational guidance pinpointed one or two stages in a person's life: either the individual's initial entry into the labor market or the individual's re-entry into the labor market after occupational dislocation. This traditional view of vocational guidance has been challenged many times since 1950.

The official National Vocational Guidance Association definition of vocational guidance, recommended in 1937, was: "the process of assisting the individual to choose an

occupation, prepare for it, enter upon it, and progress in it" (Herr & Cramer, 1992, p. 8). In 1951, Donald Super endorsed the following revision: "the process of helping a person to develop and accept an integrated and adequate picture of himself and of his role in the world of work, to test this concept against reality, and to convert it into reality, with satisfaction to himself and to society" (Herr & Cramer, 1992, p. 8). This revised definition emphasized the psychological nature of vocational choice. Since Super's redefinition of vocational guidance in 1951, there has been a shift from occupational to career models in the vocational guidance literature (Herr & Cramer, 1992).

The term "career" includes a longer time frame than occupational choice. The career model considers the interaction of educational and occupational choices across time and the sequence of occupations, jobs, and positions held. The career model "is one in which the individual is conceived of moving along one of a number of possible pathways through the educational system and on into and through the work system" (Super, 1969, p. 3).

> Career models emphasize the role of career guidance in systematically educating students or adults to the knowledge, attitudes, and skills that will be required of them at future choice points, in planning their educational programs, in selecting and preparing them for work, and in helping them anticipate and prepare for career paths available to them within the workplace. (Herr & Cramer, 1992, p. 14)

Sidney Marland, U. S. Commissioner of Education, introduced the term "career education" in 1971. He contended that all education should be geared toward the world of work and that all education should be career education. Educators should prepare students either to become properly, usefully employed immediately upon graduation from high

school or go on to further formal education (O'Toole, 1977). Immediately following Marland's introduction of career education, operational models began to occur at both the national and state levels.

This change from vocational guidance to career guidance had several implications for the goals of career guidance. Career guidance needed to: (a) move from a focus on jobs to a focus on life patterns; (b) help make clients aware of their own career socialization; (c) change from a focus on putting individuals into "what is" (matching) to preparing them for the life style choices and options of "what might be"; (d) move from a sole focus on occupational choice to the larger realm of people's lives and the interaction of the vocational and the personal; (e) help clients achieve role integration in rapidly changing societies; and (f) help individuals move beyond the stereotypic choices women and men have made in the past to expanding the range of options they are willing to consider and choose (Hansen, 1981).

This shift to career guidance emphasized the importance of developing decision-making skills; concern for self-concept; concern for life-styles, values, and leisure; free choice; individual differences; and flexibility and the ability to cope with change. By the 1980s these attributes had become commonplace to the purposes of career guidance and career counseling, and career guidance became more comprehensive. Contemporary career guidance programs focus on the entire adult population. Programs take place in secondary schools as well as in community centers, in institutions of postsecondary education, in government agencies, and in business and industry (Herr & Cramer, 1992).

As a result of the School-to-Work Opportunities Act (1994), there is an emphasis on career education with students being exposed to a variety of career choices. Each

state's school-to-work program must include work-based learning that provides job training and work experience as well as school-based learning that includes career counseling and instruction in a career major. Lewis (1997) summarized the characteristics of effective school-to-work initiatives. Some characteristics of these initiatives included: (a) involving employers in partnerships with schools and (b) providing students with a strong foundation of career information and a planned sequence of learning experiences throughout their school years that will help them develop an awareness of their own interests, goals, and abilities.

School-to-work initiatives are not only for those who do not plan to attend college. All students, including those who are college bound, benefit from initiatives that help students clarify their personal goals and determine their purposes for going to college as well as those that broaden and inform students' choices for careers/jobs. School-to-work initiatives may complement education by connecting what students learn in school with the application of knowledge in the real world of work (Brown, 1998).

As part of the effort to design a national workforce development system, the U.S. Department of Labor (USDOL) funded the implementation of a one-stop employment system. These one-stop career centers were designed to merge traditional employment and training services as well as features to attract laid-off professionals and new entrants to the workforce. Federal program guidelines specify that all one-stop customers must receive information about the full range of services related to employment, assistance with filing unemployment insurance claims, and information on job training and education, assessment of skills, and job counseling. One-stop career centers must also serve as information brokers and make information resources available to their customers

that will enable them to explore careers, identify job openings, develop job searches, and identify referral and placement services (Dykman, 1995). Technology is a cornerstone of the one-stop career center efforts. The U.S. Department of Labor's America's Job Bank (AJB), an electronic listing of job openings nationwide, demonstrates the importance of the role of technology. One-stop career centers must provide customers access to such electronic resources (Imel, 1996).

The vast number of career opportunities available today can overwhelm people attempting to find their niche in the world of work. With advancing technology, some of today's jobs may not exist tomorrow. In order to prosper in today's society, individuals need the tools to help them survive. Accurate information about occupations and how they meet personal interests and needs may be among the best tools a person could be provided in the lifelong career process (Dietz, 1998). Career guidance has played an integral part in a working society for over a century. The future of the workplace will continually change, and it seems that a life-long need for career guidance will grow.

Career Information

In 1989 a telephone survey of adults was conducted by the Gallup organization for the National Occupational Information Coordinating Committee and the National Career Development Association (National Occupational, 1990). The survey found that almost two-thirds of American adults would seek more information about career options if they were starting their careers over again. Only about 4 in 10 working adults followed a definite plan in mapping out their careers. In addition, 53% of the respondents said

public high schools were not providing the training in job-seeking skills for students who were not going to college; and 40% said high schools were not providing enough help to students in choosing careers. Given the number of complaints about the lack of guidance and counseling in high schools and community colleges, it is likely that some students enter some programs without understanding that the economic returns are not substantial (Grubb, 1999).

The findings of the 1989 Gallup survey paralleled those of a 1987 Gallup survey on career development (Gallup Organization, 1987). In the 1987 data, somewhat fewer (about 10.8 million employed workers) reported the need for help in selecting, changing, or obtaining a job. About one in three of the respondents (32.7%) reported that they had not sought help or advice in career development. Those who did seek help (41.2%) typically sought help through self-directed activities such as library visits, reading classified ads, or taking interest inventories. About one-half of all respondents (51.1 %) believed that most adult Americans did not know how to interpret and use information to make intelligent career decisions.

The need for improvement in how children are educated and prepared for work was addressed in federal initiatives and proposals, ranging from the expansion of Head Start to retraining for dislocated workers. The School-to-Work Opportunities Act (1994) emphasized the importance of career development and labor market, occupational, and career information. With the goal of checking the public's perceptions again, the National Career Development Association (NCDA) commissioned The Gallup Organization to conduct a 1993 national survey on working in America. The National Occupational Information Coordinating Committee (NOICC) supported the effort, as in earlier surveys,

and worked with NCDA on the analysis and presentation of the findings. The national survey of working America was conducted from September 27 through October 27, 1993. The results were based on telephone interviews with a national sample of adults 18 years of age and older. A total of 1,046 adults participated in the telephone survey (Hoyt & Lester, 1995).

The 1993 NCDA Gallup Poll asked whether respondents had discussed possible career choices with a professional counselor in a school or college. About 30% of all adults, and 50% of the 18-25-year-olds, said they had done so. About 9% said they had consulted a professional career counselor in a fee-charging agency, and 10% had visited a career development person who was not a professional counselor. Almost 10% of all adults said they needed help in the past year in selecting, changing, or getting a job. This is about the same percentage as in earlier polls.

About 40% of adults said they would turn to friends or family if they needed help in choosing, changing or finding a job. Thirty-seven percent would go to some type of career counselor, and about 17% said they would seek help from a present or former employer. Ten percent said they would turn to a community, business, or religious leader while 8% of all adults said they didn't or wouldn't know where to go for help.

Asked what job and career information sources they had used at some time in the past, 47% of all adults mentioned newspapers, magazines, and television. Other sources mentioned by at least 10% of all adults included college or university career information centers, public job services or job training programs, and public libraries. Seven percent of all adults said they had used a computerized career information delivery system, as compared with 2% in the 1987 poll. One-third (33%) said they had used no job

information sources (Hoyt & Lester, 1995).

Today, businesses are bearing extensive costs resulting from the mismatch between school learning and workplace requirements. "It is estimated that American business spends nearly $30 billion training and retraining its workforce" (National School, 1996, p. 3).

> Over the years, larger and larger proportions of high school graduates have enrolled in 4-year colleges. While many people view college as essential to success in the labor market, the movement toward 4-year colleges also has its critics. These critics contend that
>
> a. The public has come to believe that almost all high school graduates should go to college;
>
> b. This "college movement" is sweeping many marginally qualified or unqualified students into college, and hence the average ability of college students has declined;
>
> c. As a result of these declining ability levels, college noncompletion and dropout rates have increased;
>
> d. Many noncompleters do poorly in the labor market and would have been better advised to pursue other education and training options;
>
> e. These noncompleters are also burdened by unnecessary debts from college loans; and
>
> f. Even college graduates are not doing very well in the labor market. (National Library, 1999, p. vii)

The Reverse Transfer Phenomenon

Clark's study (1960) first acknowledged the existence of "reverse flow" or reverse transfer students who enrolled in a two-year junior college after an unsuccessful attempt at a four-year state college. Clark contended that reverse transfer students returned to the junior college to improve their academic credentials before transferring back to a four-year state college. Heinze and Daniels (1970) redefined reverse transfer, eliminating the "second chance" or "salvage" function of the community college. Heinze and Daniels (1970) used the broadest definition of the term reverse transfer: any student, full- or part-time, whose last work was at a baccalaureate granting college.

> Research dealing with reverse transfers was expanded primarily due to the response to two issues occurring in the 1970's. Questions of accountability and effectiveness for all of higher education began to surface in the 70's. Many felt that the success of community colleges ought to be measured by the completion and transfer rates of its students. Subsequently, many studies were undertaken to look at the different types of students attending the two-year college and the functions which the two-year college was expected to perform.
>
> The second issue was the acknowledgement in the 1970's of the non-traditional student enrolled in higher education. Studies of these students and their patterns of enrollment and reasons for enrollment also highlighted the completer reverse transfer as a recent phenomena [sic] belonging to this non-traditional student group. (Klepper, 1990, p. 40-41)

Quinley and Quinley (1998) described a different type of community college student who enters the community college after successfully completing a four-year or higher degree. These students have already demonstrated their academic ability, and many are looking for a different kind of second chance: (a) getting their first economically successful job, (b) starting a new or supplementary career (sometimes after a previous successful long-term position), (c) exploring what they really want to do for a career, or (d) developing serious, creative, self-enrichment interests.

Many of the research findings on the topic of post-baccalaureate reverse transfer students are drawn from studies that focus on reverse transfer students and happen to find that the post-baccalaureate reverse transfer is a subgroup of the sample population. Klepper's (1990) research concluded that post-baccalaureate reverse transfer students, even though part of the community college transfer population, were significantly different from other transfer students.

Table 1 includes a list of reverse transfer studies.

Table 1

Review of Research on Reverse Transfer Students

Date	Author	Location/Subjects	Focus
1960	Clark	San Jose State College, California	First study to describe reverse transfer as a distinct community college population (reverse flow students).

(table continues)

Date	Author	Location/Subjects	Focus
1970	Heinze & Daniels	Nationwide; 46 community colleges	Quantify prevalence of reverse transfers; identify difficulties students encounter when transferring; implications of reverse transfer phenomenon to assist community college policy formulation.
1975	Lee	5 universities and 5 community colleges	Assess the academic achievements and educational destination of students who transfer from universities to community colleges so that the objectives of the "retread function" of 2-year colleges can be more clearly defined.
1978	Martinko	Post-secondary degree granting institutions in Pennsylvania	Determine success of transfer students as measured by their grade-point averages.
1981	Swedler	Northern Illinois University	Investigate size of reverse transfer population at NIU; academic characteristics of their college attendance; their success at NIU, and possible factors in their success.
1982	Renkiewicz et al.	Los Rios Community College District, California	Determine size of reverse transfer population; differences in characteristics of reverse transfers and other students; reasons students transferred. Identify 5 subgroups of community college students.

(table continues)

Date	Author	Location/Subjects	Focus
1982	Rooth	Northampton County Area Community College, Pennsylvania 3.3% PBRTS	Identify reverse transfer students; determine demographic characteristics; investigate their educational backgrounds, experiences, and personal & professional objectives.
1982	Ross	Piedmont Virginia Community College 13% PBRTS	Determine proportion of students who had obtained a degree or certificate; demographic characteristics of degree/certificate holders; their reasons for attending PVCC compared to non-degree holders; differences between degree and non-degree holders enrolled in programs associated with high employability.
1982	Slark	Santa Ana College, California	Determine reverse transfer students' educational interests and matriculation patterns.
1983	Anderson	Community College of Denver 30% PBRTS	Investigate selected characteristics and experiences of reverse transfer students; understand the extent to which student development programs and services are needed and offered for reverse transfer students.

(table continues)

Date	Author	Location/Subjects	Focus
1983	Boyd	57 institutions of the North Carolina Community College System	Compare reverse transfer and non-reverse transfer curriculum students; compare reverse transfers with/without 4-year college degree; examine reverse transfers without 4-year college degree in terms of their plans to work toward the degree.
1983	Hudak	305 public community and junior colleges nationwide	Determine how reverse transfer students are classified and their impact upon the institution.
1984	Berg	Los Rios Community College District, California 7.6% PBRTS	Provide information on reverse transfer students' characteristics and reasons for leaving and attending colleges as compared to first-time community college students. Five student groups identified.
1984	Steenhoek	Cerritos Community College, California 7.5% PBRTS	Determine demographic characteristics and educational objectives of reverse transfer students.
1986	Hogan	13 Kentucky community colleges 4.8% PBRTS	Investigate reverse transfer students in terms of demographics, educational goals, and academic performance.

(table continues)

Date	Author	Location/Subjects	Focus
1987	Fuller	Montgomery College, Maryland	Examine similarities and differences in the self-reported study habits and attitudes of reverse transfer students and community college native students.
1989	Kajstura	10 Illinois community colleges	Investigate reverse transfer students in terms of demographic characteristics, reasons for transferring, educational and vocational plans, and student satisfaction. Compare participants' experiences at 2-year college with experiences at 4-year college.
1990	Hill-Brown	Johnson County Community College, Kansas	Examine reverse transfer students to determine their characteristics and patterns of reverse transfer.
1990	Klepper	Piedmont Virginia Community College 24% PBRTS	Identify and describe PBRTS enrolled in credit courses at PVCC. Examine PBRT phenomenon in relation to economic and workforce changes as well as student progress.
1991	Jackson	Tarrant County Junior College, Texas 22% PBRTS	Identify demographic and academic characteristics of students transferring from north Texas area senior colleges to TCJC.

(table continues)

Date	Author	Location/Subjects	Focus
1991	Rothman	7 Ohio two-year technical colleges	Analyze reasons reverse transfer students discontinue their studies at a four-year college, enter a technical college, and students' level of satisfaction with academic and non-academic items at both colleges.
1994	Lambert	2 public community colleges in Baltimore, Maryland	Examine and describe perceptions and experiences of PBRTS; examine and describe campus-based thinking about the phenomenon of PBRTS; ascertain the reactions of faculty and administration to the assertion that PBBRTS are over-represented in allied health and high technology programs.
1995	Delaney	Quinsigamond Community College, Worcester, Massachusetts	Develop a demographic profile of PBRTS; to examine employment experiences after receiving degree or certificate from QCC. Identify predictors determining employment and unemployment.
1998	Harris	Univ. of Kentucky Community College System Sample—1,392 RTS 288 PBRTS	Develop new knowledge about community college reverse transfer students in Kentucky. Determine demographic characteristics, reasons for enrolling at the community college, and educational goals.

(table continues)

Date	Author	Location/Subjects	Focus
1998	Halvorson	Minnesota Technical Colleges 12% PBRTS	Define characteristics, behaviors, and educational goals of PBRTS.
1998	Quinley & Quinley	Central Piedmont Community College, North Carolina 7% PBRTS	Better understand characteristics of PBRTS and their reasons for attending the community college.

Summary and Conclusions

1. The workplace is continually evolving, creating an increased need for the educational system to meet the needs of the changing workplace.

2. The workforce is constantly changing due to advances in technology, the decline in the industrial workforce, the aging population, the increase of women and minorities in the workforce, and the shift to a global economy.

3. As more occupational choices become available, the need for career guidance increases for workers of all ages and in all stages of life.

4. Jobs in the future will depend on employees who can put knowledge to work. Education reform has spurred many initiatives in the 1990s to address this need, such as Goals 2000 Act, School-to-Work Opportunities Act, SCANS Report, and Workforce Investment Act 1998.

5. The shift from occupation to career guidance includes a longer time frame, which considers the interaction of educational and occupational choices across time and the sequence of occupations, jobs, and positions held.

6. College graduates in the labor market exceed the demand, leading to underemployment of many. This trend is expected to continue well into the 21st Century.

7. Post-baccalaureate reverse transfer students enroll in a community college degree or certificate program for a variety of reasons, including personal interest reasons as well as career-related reasons.

8. The need for a national study of reverse transfer students has been called for in the research literature (Quinley & Quinley, 1998; Delaney, 1995; Lambert, 1994; Klepper, 1990, and Kajstura, 1989).

9. Since reverse transfer students and post-baccalaureate reverse transfer students are quite different in terms of demographic characteristics, educational goals, and academic needs, it is important that they be studied separately.

CHAPTER 3

RESEARCH METHODS

Description of Research Method

The problem of this research was: What factors influenced post-baccalaureate reverse transfer students to enroll in a community college degree or certificate program, and what types of career guidance have these students utilized?

Descriptive research was used to conduct this study. This method is nonexperimental because it deals with relationships among nonmanipulated variables. Descriptive research leads to generalizations beyond the given sample and situation (Best & Kahn, 1998). The survey method of descriptive research was chosen as the most suitable method for this research project. More specifically, a self-report questionnaire was used. This type of survey collects factual data provided by the subjects.

Subjects

The population for the study consisted of post-baccalaureate reverse transfer students enrolled in Illinois community colleges for the Fall Semester, 1999. The sample for this study included PBRTS who were enrolled in degree or certificate programs at six Illinois community colleges.

The Illinois Community College Board (ICCB) was unable to provide the names and addresses of PBRTS enrolled in the 48 Illinois community colleges. Therefore, appropriate personnel at community colleges were contacted individually. A random sampling of community colleges was attempted; however, many of the community

colleges contacted were unable or unwilling to provide information about post-baccalaureate reverse transfer students. Others would not participate due to privacy issues. The City Colleges of Chicago were asked to participate in the study; however, identification of post-baccalaureate reverse transfer students was not possible due to the large number of students and the small number of employees to track the information. The selection of community colleges was based on geographic location and availability of data.

Other researchers experienced similar problems. For example, Lambert's study (1994) excluded several Maryland community colleges because college administrators were unable to identify post-baccalaureate reverse transfer students within their student populations. Kajstura (1989) stated that some community college administrators were unable to participate in his study of Illinois community colleges, citing confidentiality concerns and lack of capability to identify the subject student population.

Community colleges were chosen at random and contacted by telephone. Contacts were made until a community college from each of six of the seven education regions, as categorized by the Illinois State Board of Education, was willing and able to participate in the study (Appendix A). The City Colleges of Chicago, which comprise the seventh region, were unable to participate.

A nonprobability sampling was chosen to be the most appropriate type of sampling for the target population. A nonprobability sampling is one in which some members of the eligible target population have a chance of being chosen for participation in the survey and others do not (Fink, 1995). A nonprobability sampling of post-baccalaureate reverse transfer students from the following community colleges was

taken: Black Hawk College, Moline, Illinois; John A. Logan College, Carterville, Illinois; John Wood Community College, Quincy, Illinois; Parkland College, Champaign, Illinois; Prairie State College, Chicago Heights, Illinois; and Southwestern Illinois College (formerly Belleville Area College), Belleville, Illinois.

A total of 893 post-baccalaureate reverse transfer students were identified at the six participating community colleges as follows: Black Hawk College, 249; John A. Logan College, 40; John Wood Community College, 45; Parkland College, 140; Prairie State College, 58; and Southwestern Illinois College, 361.

Using Brown's (1986) table for selecting sample sizes, it was determined that to obtain a ±5% error limit, using the infinity population size, 384 responses were required. Based on the 68.4% response rate from the pilot study, it was determined that a minimum of 610 surveys should be mailed in order to obtain the 384 responses. It was decided to send surveys to 75% of the identified post-baccalaureate reverse transfer students at each of the community colleges. Names were randomly selected, and a total of 671 surveys were mailed.

When names and addresses of post-baccalaureate reverse transfer students were requested from the community colleges, it was specified that only those enrolled in degree or certificate programs should be included. Two of the community colleges had disproportionately high numbers of PBRTS. They were contacted a second time to verify that only those students enrolled in degree or certificate programs had been included. Both indicated that the information was accurate. According to Delaney (1995), information about reverse transfer students is not completely accurate because of lack of accuracy on admissions materials.

Data Collection Instrumentation and Analysis

A questionnaire was chosen to be the most convenient data collection instrument to address the research questions of this study. The questionnaire for this study was constructed using the Piedmont Virginia Community College (PVCC) survey (Klepper, 1990) as a model. Renkiewicz et al. (1982) first used the survey at Los Rios Community College District in California. The following statement describes the construction of the Los Rios District survey:

> The questionnaire used in the study was developed by a subcommittee of the California Association of Community Colleges (CACC) Commission on Instruction and Research and Development, in consultation with a number of researchers in the community colleges and university systems. It was reviewed by the CACC Commission on Instruction, Research and Development and Student Services. A field test of the survey instrument was conducted at Chabot College-Valley Campus, Livermore, California, in early spring, 1982. Students with varying degrees of experience and age, including many reverse transfer students were surveyed. Because no minorities were included in the Chabot College-Valley Campus population, minority students were included in a field test at Sacramento City College during the Spring, 1982 registration. Students in Los Rios District were interviewed after completing the questionnaire and asked a series of questions about their responses. The questionnaire was revised after the field test and further field review. The Los Rios Community College District in Sacramento, California was selected as a site for the

field implementation. (Renkiewicz et al., 1982, p. 12, as cited in Klepper, 1990)

Klepper (1990) expanded and revised the survey and field tested it at Piedmont Virginia Community College during the Summer Semester 1989. Feedback from field testing, and a critical review by a research expert at the University of Virginia Education School to assess survey construction and content, resulted in the final survey questionnaire.

After receiving permission to use the survey from Dr. Klepper (Appendix B), minor revisions were made to the Klepper (1990) survey, and a section on career information sources was added. The questionnaire contained five parts. Part I of the questionnaire determined the respondent's enrollment status during the Fall 1999 Semester. Part II of the questionnaire included several questions regarding demographic factors. Students were questioned regarding age, marital status, ethnic origin, gender, employment status, and level of job satisfaction. Part III of the questionnaire included questions about the respondent's educational background and experience. Parts IV and V of the questionnaire solicited information from the participants in the form of Likert-type scales. Part IV was designed to provide a means of identifying factors that influenced the individual to enroll in the community college. Students were asked to rate various reasons for enrollment on a scale of 1 to 5, with 5 being very important and 1 being not applicable. Part V of the questionnaire was designed to provide a means of identifying sources the individual used to obtain job or career information before enrolling in the current program. Participants were asked to rate career/job information sources utilized on a scale of 1 to 5, with 5 being very important and 1 being not applicable.

A panel of five experts from Southern Illinois University Carbondale reviewed the questionnaire. The following changes were made based on their input: (a) Section I regarding the respondent's enrollment status during the Fall 1999 Semester was added; (b) the Career/Job Information Sources section was divided into two parts: Section V, pertaining to information utilized before attending college for the first time and Section VI, pertaining to information utilized before enrolling in the most recent/current program; and (c) Internet was added to the list of sources for career/job information in Sections V and VI.

Table 2 shows which questionnaire items were used to determine results of each research question. The type of statistical analysis for each research question is also described.

Table 2

Statistical Analysis of Data by Research Question

Research Question	Questionnaire Items Used	Statistical Analysis Used
Question 1—What factors influenced PBRTS to enroll in community college degree or certificate programs?	IV. a, b, c, d, e, f, g, h, i, j, k, l, m, n, o	Descriptive statistics presented in table format
Question 2—What career guidance resources did PBRTS utilize before enrolling in college for the first time?	V. a, b, c, d, e, f, g, h, i, j	Descriptive statistics presented in table format

(table continues)

Research Question	Questionnaire Items Used	Statistical Analysis Used
Question 3—What career guidance resources did PBRTS utilize before enrolling in a community college degree or certificate program after having a baccalaureate or higher degree?	VI. a, b, c, d, e, f, g, h, i, j	Descriptive statistics presented in table format
Question 4a—What is the association between age and type of program in which PBRTS are enrolled?	II. 1, III. 12	Chi-square test (X^2)
Question 4b—What is the association between marital status and type of program in which PBRTS are enrolled?	II. 2, III. 12	Chi-square test (X^2)
Question 4c—What is the association between ethnic origin and type of program in which PBRTS are enrolled?	II. 3, III. 12	Chi-square test (X^2)
Question 4d—What is the association between gender and type of program in which PBRTS are enrolled?	II. 4, III. 12	Chi-square test (X^2)
Question 4e—What is the association between high school focus and type of program in which PBRTS are enrolled?	III. 8, III. 12	Chi-square test (X^2)

The revised research instrument was submitted to the Human Subjects Committee of Southern Illinois University Carbondale with a Request for Approval of Research Activities Involving Human Subjects. The request was approved on January 5, 2000. (Appendix C).

A pilot test was conducted by administering the questionnaire to 19 subjects enrolled in the Fall 1999 Semester at Rend Lake Community College, Ina, Illinois. On January 14, 2000, the subjects were sent a packet including a cover letter explaining the pilot testing procedure (Appendix D), a sample questionnaire, a sample cover letter, a pilot study questionnaire (Appendix E), and a postage-paid return envelope. The pilot test cover letter and pilot test checklist were printed on colored paper to avoid confusion with the sample cover letter and questionnaire. The subjects were asked for their input regarding the questionnaire and cover letter. A deadline of January 28, 2000, was given for returning the packet. A total of 13 or 68.4% responded. Based on input from the pilot study respondents, the questionnaire was revised by adding "retired" as a choice for employment status.

Data Collection Procedures

The questionnaire (Appendix F) was mailed to 671 subjects on February 21, 2000. A cover letter (Appendix G) was included, stating the importance of the study, guaranteeing the participants' anonymity, and explaining the participants' rights. The participants were asked to return the survey by March 6, 2000. A self-addressed, stamped envelope was also enclosed for ease in returning the questionnaire. Stuffed envelopes were provided to John A. Logan College and Southwestern Illinois College for mailing.

Because of privacy issues these colleges were unable to provide the names and addresses of participants.

Follow-up procedures were not performed because the names and addresses of subjects were not available from those community colleges that were willing to affix address labels and mail stuffed envelopes but did not furnish subjects' names and addresses due to privacy issues.

Data Analysis

As questionnaires were received, the data were manually entered into a Microsoft Excel spreadsheet. The data were checked for accuracy by inspecting every tenth returned questionnaire with the corresponding data entered in the spreadsheet. That data had been entered with 100% accuracy. Personnel from the Statistics Lab in the Department of Educational Psychology and Special Education at Southern Illinois University Carbondale completed analysis of the data. The Statistical Analysis System, Version 6.11 (SAS Institute, 1989) was employed to provide descriptive statistics. Percentages and means were generated and presented to describe the sample. In addition, frequencies were calculated using multiple Chi-square (X^2) tests.

In Sections IV, V, and VI, responses of "not applicable" were removed before means were calculated, leaving very important, 4; important, 3; somewhat important, 2; and not important, 1.

CHAPTER 4

ANALYSIS OF DATA

Introduction

The problem of this research was: What factors influenced post-baccalaureate reverse transfer students to enroll in a community college degree or certificate program, and what types of career guidance have these students utilized?

Treatment of Data

A questionnaire was chosen to be the most convenient data collection instrument to address the research questions of this study. Renkiewicz et al. (1982) first used the survey instrument at Los Rios Community College District in California. Klepper (1990) revised the questionnaire and used it for her study at Piedmont Virginia Community College (PVCC). Using the Klepper (1990) survey as a model, the questionnaire for this study was constructed.

The questionnaire was mailed to 671 subjects on February 21, 2000. A cover letter was included, stating the importance of the study, guaranteeing the participants' anonymity, and explaining the participants' rights. Participants were asked to return the survey by March 6, 2000. A self-addressed, stamped envelope was also enclosed for ease in returning the questionnaire.

Of the 671 questionnaires, 15 were returned because of outdated addresses. An adjusted sample of 656 was utilized. A total of 329 subjects or 50.2% responded by March 24, 2000. Of those, 108 respondents were not enrolled in community college

degree or certificate programs but were taking classes that did not lead to an associate's degree or certificate. Therefore, data from 221 (33.7%) respondents were analyzed, resulting in an error limit of ± 7% (Brown, 1986).

Respondent Data

The demographic description of the subjects is reported using such descriptive statistics as frequencies, percentages, and means. Not all demographics are reported since some were difficult to categorize. PBRTS held a total of 108 different jobs when deciding to enroll in the community college program. These jobs were not reported due to difficulty in categorizing.

Table 3 shows that the highest percentage of respondents (71 or 32.1%) were between 30 and 39 years of age. The mean age of respondents was 38.5. There were an equal number of respondents (54 or 24.4%) in the 20-29 age group and the 40-49 age group.

Table 3

Number of Respondents by Age Range

Age Range	Frequency	Percentage	Mean
20-29	54	24.4	38.5
30-39	71	32.1	
40-49	54	24.4	
50-59	34	15.4	
60 and over	8	3.6	
Total	221	99.9	

Note. Due to rounding error, the total percentage is 99.9%.

Table 4 shows that 125 (60.1%) of the respondents were married. The 61 (29.3%) of respondents in the second largest group were never married.

Table 4

Number of Respondents by Marital Status

Marital Status	Frequency	Percentage
Married	125	60.1
Never Married	61	29.3
Divorced	17	8.2
Widowed	3	1.4
Separated	2	1.0
Total	208	100.0

The majority of respondents (174 or 84.1%), as shown in Table 5, were Caucasian. Each of the other ethnic groups accounted for less than 8% of the total respondents. There were no Native American respondents.

Table 5

Number of Respondents by Ethnic Origin

Ethnic Origin	Frequency	Percentage
Caucasian	174	84.1
Asian	15	7.2
African American	10	4.8
Hispanic	5	2.4
Other	3	1.4
Native American	0	0
Total	207	99.9

Note. Due to rounding error, the total percentage is 99.9%

Table 6 indicates that respondents were almost evenly divided by gender with 107 (51.4%) males and 101 (48.6%) females.

Table 6

Number of Respondents by Gender

Gender	Frequency	Percentage
Male	107	51.4
Female	101	48.6
Total	208	100.0

As shown in Table 7, the majority (130 or 59.1%) of the respondents were employed full time and 43 (19.5%) are employed part time. Thirty-seven (16.8%) were unemployed, while 10 (4.5%) were retired.

Table 7

Number of Respondents by Employment Status

Employment Status	Frequency	Percentage
Full-time	130	59.1
Part-time	43	19.5
Unemployed	37	16.8
Retired	10	4.5
Total	220	99.9

Note. Due to rounding error, the total percentage is 99.9%.

As shown in Table 8, 51 (24.8%) respondents were dissatisfied with their employment before entering the community college degree or certificate program; however, 73 participants (35.4%) were very satisfied with their employment and 82 (39.8%) were somewhat satisfied.

Table 8

Number of Respondents by Level of Employment Satisfaction

Level of Employment Satisfaction	Frequency	Percentage
Somewhat Satisfied	82	39.8
Very Satisfied	73	35.4
Dissatisfied	51	24.8
Total	206	100.0

College preparatory was the high school focus for 163 (73.8%) of the respondents, as shown in Table 9.

Table 9

Number of Respondents by High School Focus

High School Focus	Frequency	Percentage
College Preparatory	163	73.8
General	41	18.6
Vocational	9	4.1
Other	8	3.6
Total	221	100.1

Note. Due to rounding error, total percentage is 100.1%

Table 10 shows that the majority of respondents did not attend a community college before receiving a baccalaureate or higher degree. This group consisted of 135 (61.1%) of the respondents.

Table 10

Number of Respondents by Attendance in Community College Before Attending 4-Year College or University

Attended Community College	Frequency	Percentage
No	135	61.1
Yes	86	38.9
Total	221	100.0

A baccalaureate degree was the highest degree earned by the majority (181 or 81.9%) of respondents, as shown in Table 11. Forty (18.1%) of respondents held a master's degree. No respondents had earned a doctoral or professional degree.

Table 11

Number of Respondents by Highest Degree Earned

Highest Degree Earned	Frequency	Percentage
Bachelor's Degree	181	81.9
Master's Degree	40	18.1
Professional Degree	0	0.0
Doctoral Degree	0	0.0
Total	221	100.0

The respondents had a wide variety of baccalaureate degree majors. The majors were categorized according to the names of the eight colleges at Southern Illinois University Carbondale. Table 12 shows the distribution of majors based on these categories. The category with the highest number of respondents was Liberal Arts, with 99 (44.8%).

Table 12

Number of Respondents by Baccalaureate Degree Major

Baccalaureate Classification	Frequency	Percentage
Liberal Arts	99	44.8
Business & Administration	29	13.1
Education	29	13.1
Science	24	10.9
Applied Sciences and Arts	12	5.4
Engineering	9	4.0
Mass Communications & Media Arts	6	2.7
Total	221	99.9

Note. Due to rounding error, the total percentage is 99.9%

The current associate degree or certificate programs of the respondents were grouped into categories based on departments at the selected community colleges. The

distribution of programs was shown in Table 13. The highest number of respondents was enrolled in computer-related programs with 77 (35.2%). Health services programs had the second highest number of respondents with 44 (20.1%).

Table 13

Number of Respondents by Current Associate Degree or Certificate Program

Current Degree or Certificate Program	Frequency	Percentage
Computer	77	35.2
Health Services	44	20.1
Human and Public Service	33	15.1
Applied Technologies	24	11.0
Liberal Arts	15	6.8
Business	10	4.6
Science	6	2.7
Education	4	1.8
Applied Arts	3	1.4
Office	3	1.4
Total	219	100.1

Note. Due to rounding error, the total percentage is 100.1%.

The length of time between the respondents' completing a baccalaureate degree and enrolling in a community college degree or certificate program ranged from 3 months to 40 or more years. Table 14 shows that the mean length of time between was 10.9 years. The highest number of respondents (83 or 37.9% enrolled in a community college degree or certificate program within the first five years after completing the baccalaureate degree.

Table 14

Number of Respondents by Length of Time (in Years) Between Baccalaureate Degree and Current Degree or Certificate Program

Length of Time	Frequency	Percentage	Mean
0-5	83	37.9	10.9
5.5-10	49	22.4	
11-15	28	12.8	
16-20	24	11.0	
21-25	19	8.7	
26-30	5	2.3	
31-35	6	2.7	
36-40	5	2.3	
Total	219	100.1	

Note. Due to rounding error, the total percentage is 100.1%

Respondent community college attendance status as depicted in Table 15 shows that 166 (75.5%) respondents attended full-time, and 54 (24.5%) attended part time during the Fall 1999 Semester.

Table 15

Number of Respondents by Attendance Status

Attendance Status	Frequency	Percentage
Full-time	166	75.5
Part-time	54	24.5
Total	220	100.0

Findings According to Research Question

Research Question 1

What factors influenced post-baccalaureate reverse transfer students to enroll in community college degree or certificate programs?

Table 16 shows the frequencies, percentages, and means for each of the participants' reasons for enrolling in a community college degree or certificate program. The number of participants who marked each reason is indicated after the reason (n = x). Although some reasons were marked by more participants than other reasons, the means are listed based on degree of importance. Means were calculated using 4, very important;

3, important; 2, somewhat important; and 1, not important. The data are presented in order of means from high to low. The factor with the highest mean response was "learn new skills" at 3.53. "Personal growth and interests" had the second highest mean response at 3.24; and "change job fields" was third, with 3.21.

Table 16

Reasons for Enrolling in Community College Degree or Certificate Program

Reasons	Very Important		Important		Somewhat Important		Not Important		Mean Response
	f	%	f	%	f	%	f	%	
Learn new skills (n=201)	128	63.7	53	26.4	18	9.0	2	1.0	3.53
Personal growth and interests (n=192)	93	48.4	63	32.8	25	13.0	11	5.8	3.24
Change job fields (n=160)	86	53.8	39	24.4	17	10.6	18	11.3	3.21
Improve occupational status (n=179)	94	52.5	42	23.5	22	12.3	21	11.7	3.17
Update existing skills (n=150)	63	42.0	48	32.0	20	13.3	19	12.7	3.03
Get training to get a job (n=175)	68	38.9	52	29.7	31	17.7	24	13.7	2.94
Earn more money (n=178)	69	38.8	37	20.8	35	19.7	37	20.8	2.78
Prepare for license or exam (n=114)	39	34.2	25	21.9	20	17.5	30	26.3	2.64
Increase self-confidence (n=166)	34	20.5	52	31.3	39	23.5	41	24.7	2.48
Dissatisfaction with current job (n=141)	31	22.0	28	19.9	45	31.9	37	26.2	2.38
Required by employer (n=69)	19	27.5	9	13.0	14	20.3	27	39.1	2.29

(table continues)

Reasons	Very Important		Important		Somewhat Important		Not Important		Mean Response
	n	%	n	%	n	%	n	%	
Get training related to current job (n=118)	31	26.3	32	27.1	24	20.3	31	26.3	2.28
Move up in current job (n=98)	17	17.3	23	23.5	24	24.5	34	34.7	2.23
Prepare to transfer (n=103)	22	21.4	17	16.5	21	20.4	43	41.7	2.17
Meet new people (n=158)	14	8.9	28	17.7	48	30.4	68	43.0	1.92

Note. Responses of "Not Applicable" and those that were left blank were not included in calculating the means.

Research Question 2

What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in college for the first time?

Table 17 shows the frequencies, percentages, and means for each of the career guidance resources utilized by post-baccalaureate reverse transfer students before enrolling in college for the first time. The number of participants who marked each resource is indicated after the reason (n = x). Although some resources were marked by more participants than other resources, the means are listed based on degree of importance. Means were calculated using 4, very important; 3, important; 2, somewhat important; and 1, not important. The data are presented in order of means from high to low.

"A friend or family member" (mean, 2.94) was the career guidance resource participants found to be the most important before enrolling in college for the first time. "College catalog/advertisement" (mean, 2.80) was second in importance, while "counselor" (mean, 2.48) and "career information center" (mean, 2.43) were third and fourth, respectively.

Table 17

Career Guidance Resources Utilized by Post-Baccalaureate Reverse Transfer Students Before Enrolling in College for the First Time

Reasons	Very Important		Important		Somewhat Important		Not Important		Mean Response
	f	%	f	%	f	%	f	%	
Friend or family member (n=79)	28	35.4	27	34.2	15	19.0	9	11.4	2.94
College catalog/advertisement (n=86)	22	25.6	35	40.7	19	22.1	10	11.6	2.80
Counselor (n=79)	15	19.0	26	32.9	20	25.3	18	22.8	2.48
Career information center (n=67)	9	13.4	23	34.3	23	34.3	12	17.9	2.43
Teacher (n=75)	11	14.7	28	37.3	15	20.0	21	28.0	2.39
Library (n=78)	12	15.4	15	19.2	26	33.3	25	32.1	2.18
Newspapers/magazines (n=62)	2	3.2	20	32.3	15	24.2	25	40.3	1.98
Public job service or job training program (n=52)	8	15.3	5	9.6	15	28.8	24	46.1	1.94
Internet (n=25)	1	4.0	7	28.0	5	20.0	12	48.0	1.88
Television/radio (n=56)	1	1.8	5	8.9	12	21.4	38	67.9	1.45

Note. Responses of "Not Applicable" and those that were left blank were not included in calculating the means.

Research Question 3

What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in a community college degree or certificate program after having a baccalaureate or higher degree?

Table 18 shows the frequencies, percentages, and means for each of the career guidance resources utilized by post-baccalaureate reverse transfer students before enrolling in a community college degree or certificate program after having a baccalaureate or higher degree. The number of participants who marked each resource is indicated after the reason (n = x). Although some resources were marked by more participants than other resources, the means are listed based on degree of importance. Means were calculated using 4, very important; 3, important; 2, somewhat important; and 1, not important. The data are presented in order of means, high to low.

"Friend or family member" (mean, 2.81) was the career guidance resource found to be most important by respondents before enrolling in their current community college degree or certificate program. "College catalog/advertisement" had the second highest mean with 2.73 and "career information center" was third with a mean of 2.24.

Table 18

Career Guidance Resources Utilized by Post-Baccalaureate Reverse Transfer Students Before Enrolling in Current Community College Degree or Certificate Program

Reasons	Very Important		Important		Somewhat Important		Not Important		Mean Response
	f	%	f	%	f	%	f	%	
Friend or family member (n=91)	30	33.0	28	30.8	19	20.9	14	15.4	2.81
College catalog/advertisement (n=99)	21	21.2	43	43.4	22	22.2	13	13.1	2.73
Career information center (n=87)	17	19.5	20	23.0	17	19.5	33	38.0	2.24
Newspapers/magazines (n=79)	8	10.1	28	35.4	14	17.7	29	36.7	2.19
Counselor (n=69)	9	13.0	19	27.5	14	20.3	27	39.1	2.14
Internet (n=78)	12	15.3	19	24.4	15	19.2	32	41.0	2.14
Library (n=85)	9	10.6	16	18.8	20	23.5	40	47.1	1.93
Teacher (n=66)	6	9.1	16	24.2	9	13.6	35	53.0	1.89
Public job service or job training program (n=65)	4	6.2	6	9.2	12	18.4	43	66.2	1.55
Television/radio (n=69)	2	2.9	9	13.0	11	15.9	47	68.1	1.51

Note. Responses of "Not Applicable" and those that were left blank were not included in calculating the means.

To analyze the data for the following research questions, a Bonferroni Adjustment was made to the error term to avoid the probability of making a T I error when doing multiple nonorthogonal contrasts. Therefore, the alpha (α) level of .05 was divided among the five associations tested. The associations tested that belong to this family of comparisons were: (a) age by type of program, (b) marital status by type of program, (c) ethnic origin by type of program, (d) gender by type of program, and (e) high school focus by type of program. Each test was run using an alpha (α) level of .01 to determine significance.

Research Question 4A

Was there a greater-than-chance association between age and the type of program in which post-baccalaureate reverse transfer students were enrolled?

A Chi-square (X^2) test was performed. No statistically significant relationship was determined between post-baccalaureate reverse transfer students' ages and the types of programs in which they were enrolled [X^2 (36, N = 219) = 50.766, p = .052] (Appendix H).

Research Question 4B

Was there a greater-than-chance association between marital status and the type of program in which post-baccalaureate reverse transfer students were enrolled?

Data were analyzed using a Chi-square (X^2) test. No statistically significant association was found between marital status and the type of program in which post-

baccalaureate reverse transfer students were enrolled [X^2(36, N = 206) = 29.324, p = .777] (Appendix H).

Research Question 4C

Was there a greater-than-chance association between ethnic origin and the type of program in which post-baccalaureate reverse transfer students were enrolled?

Data analysis, using the Chi-square (X^2) test, revealed that no statistically significant association between ethnic origin and the type of program in which post-baccalaureate reverse transfer students were enrolled [X^2(36, N = 205) = 32.606, p = .631] (Appendix H).

Research Question 4D

Was there a greater-than-chance association between gender and the type of program in which post-baccalaureate reverse transfer students were enrolled?

A Chi-square (X^2) test was used to analyze the data. A statistically significant association [X^2 (9, N = 206) = 49.806, p = .001] was found between gender and the type of program in which post-baccalaureate reverse transfer students were enrolled (Appendix H). Standardized residuals were then calculated to determine significance within the cells.

As shown in Table 19, significantly more males than females selected degree or certificate programs in the Applied Technologies category. Degree or certificate programs in the Health Services category were selected by significantly more females than males.

Table 19

Statistically Significant Standardized Residuals for Chi-Square Test of Association Between Gender and Type of Program in Which PBRTS Were Enrolled

Program	Female				Male			
	n	Cell X^2	df	R	n	Cell X^2	df	R
Applied Technologies	2	9.175	9	3.03	23	9.7255	9	3.19
Health Services	35	8.294	9	2.88	7	8.7917	9	2.97

Research Question 4E

Was there a greater-than-chance association between high school focus and the type of program in which post-baccalaureate reverse transfer students were enrolled?

Data analysis, using the Chi-square (X^2) test, revealed no statistically significant association between high school focus and the type of program in which post-baccalaureate reverse transfer students were enrolled [X^2(27 N = 219) =19.99, p = .831] (Appendix H).

Additional Comments

Five respondents provided unsolicited comments. Those comments are summarized in Appendix I.

CHAPTER 5

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Nature of the Problem

Students in the United States have historically been pressured to go to college by issues of status and class. The Bureau of Labor Statistics (BLS) forecast, however, that one in three college graduates will not find college-level employment through the year 2005 (Gray & Herr, 1995). Many four-year college graduates are enrolling in community colleges because they are trying to obtain skills for employment. These students have found that there are ways to succeed other than holding the traditional baccalaureate degree (Gray & Herr, 1995).

Purpose of the Study

The purpose of the study was to contribute to a better understanding of post-baccalaureate reverse transfer students (PBRTS). More specifically, the study investigated career guidance utilization as well as factors that influenced PBRTS to enroll in community college degree or certificate programs. This information is useful to individuals involved in career guidance/counseling, as it will provide data regarding those services and resources that are most often utilized. The data will also provide information to community college administrators regarding these students' motivation for enrolling in community colleges. This will afford the opportunity to plan curricula and support services more closely designed to meet the needs of this unique group of students.

Statement of the Problem

The problem of this research was: What factors influenced post-baccalaureate reverse transfer students to enroll in a community college degree or certificate program, and what types of career guidance have these students utilized?

Research Procedures

The survey method of collecting data from post-baccalaureate reverse transfer students enrolled in degree or certificate programs in selected Illinois community colleges during the Fall 1999 semester was used for the study.

A questionnaire was developed using the Piedmont Virginia Community College Survey (Klepper, 1990) as a model. Renkiewicz et al. (1982) first used the survey at Los Rios Community College District in California. Minor revisions were made to the Klepper (1990) survey instrument, and a section on career information sources was added.

A panel of five experts from Southern Illinois University reviewed the questionnaire. Revisions were made, based on their input. After receiving approval from the Human Subjects Committee at Southern Illinois University Carbondale, the questionnaire was pilot tested on 19 subjects enrolled in the Fall 1999 Semester at Rend Lake Community College, Ina, Illinois. Based on input from pilot test respondents, an additional revision was made.

The questionnaire was mailed to 671 subjects on February 21, 2000. A cover letter and self-addressed, stamped envelope were enclosed. A follow-up was not performed because the names and addresses of subjects were not available from those

community colleges that were willing to affix address labels and mail stuffed envelopes but did not furnish subjects' names and addresses due to privacy issues.

Data from 221 useable questionnaires were analyzed using the Statistical Analysis System (SAS, Version 6.11) to provide descriptive statistics. Frequencies, percentages, and means were generated and presented to describe the sample. In addition, frequencies were calculated using multiple Chi-square (X^2) tests.

Findings

Findings on Respondents' Demographic Information

The highest number of respondents (71 or 32.1%) were between the ages of 30 and 39. The mean age of respondents was 38.5. The majority (125 or 60.1%) of the respondents were married and Caucasian (174 or 84.1%). The respondents were almost evenly divided by gender with 107 (51.4%) males and 101 (48.6%) females.

The majority (130 or 59.1%) of respondents were employed full time and 43 (19.5%) were employed part time. Thirty-seven (16.8%) were unemployed, while 10 (4.5%) were retired. Approximately one-quarter (51 or 24.8%) of the respondents were dissatisfied with their employment before entering the community college degree or certificate program; however, 73 (35.4%) respondents were very satisfied with their employment before entering the community college, and 82 (39.8%) were somewhat satisfied.

The high school focus of the majority (163 or 73.8%) of the respondents was "college preparatory." "General" was the second most frequent high school focus with 41 (18.6%) of the respondents. The majority (135 or 61.1%) of respondents did not attend a

community college before receiving a baccalaureate degree. A baccalaureate degree was the highest degree earned by the majority (181 or 81.9%) of the respondents. Forty (18.1%) held a master's degree.

Of the wide variety of baccalaureate degree majors, 99 (44.8%) of the respondents held a Liberal Arts degree. The associate degree or certificate program category in which the highest number of respondents were enrolled was Computer with 77 (35.2%). The second highest was Health Services with 44 (20.1%). The mean length of time between completing a baccalaureate degree and enrolling in a community college degree or certificate program was 10.9 years. The majority (166 or 75.5%) of respondents were enrolled as full-time students during the Fall 1999 Semester.

Findings According to Research Question

Research Question 1. What factors influenced a post-baccalaureate reverse transfer student to enroll in a community college degree or certificate program?

"Learn new skills" had the highest mean response at 3.53. "Personal growth and interests" had the second highest mean response at 3.24; and "change job fields" was third, with 3.21.

Research Question 2. What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in college for the first time?

The career guidance resource found to be the most important before enrolling in college for the first time was "friend or family member," with a mean of 2.94. "College catalog/advertisement" (mean, 2.80) was second in importance, while "counselor" (mean, 2.48) and "career information center" (mean, 2.43) were third and fourth, respectively.

Research Question 3. What career guidance resources did post-baccalaureate reverse transfer students utilize before enrolling in a community college degree or certificate program after having a baccalaureate or higher degree?

"Friend or family member" (mean, 2.81) was the career guidance resource found to be most important by respondents before enrolling in their current community college degree or certificate programs. "College catalog/advertisement" had the second highest mean with 2.73 and "career information center" was third, with a mean of 2.24.

Research Question 4A. Was there a greater-than-chance association between age and type of program in which post-baccalaureate reverse transfer students were enrolled?

No statistically significant association was determined between post-baccalaureate reverse transfer students' ages and the type of program in which they were enrolled.

Research Question 4B. Was there a greater-than-chance association between marital status and the type of program in which post-baccalaureate reverse transfer students were enrolled?

No statistically significant association was found between post-baccalaureate reverse transfer students' marital status and the type of program in which they were enrolled.

Research Question 4C. Was there a greater-than-chance association between ethnic origin and the type of program in which post-baccalaureate reverse transfer students were enrolled?

No statistically significant association was determined between post-baccalaureate reverse transfer students' ethnic origin and the type of program in which they were enrolled.

Research Question 4D. Was there a greater-than-chance association between gender and the type of program in which post-baccalaureate reverse transfer students were enrolled?

As determined by a Chi-square (X^2) test, a statistically significant association was determined between post-baccalaureate reverse transfer students' gender and the type of program in which they were enrolled [9, N = 206) = .0001, $p < .01$].

Research Question 4E. Was there a greater-than-chance association between high school focus and the type of program in which post-baccalaureate reverse transfer students were enrolled?

No statistically significant association was found between post-baccalaureate reverse transfer students' high school focus and the type of program in which they were enrolled.

Discussion

Studies of reverse transfer students have been found in the literature since Clark (1960) first recognized this group within the community college student population. A decade later, Heinze and Daniels (1970) redefined reverse transfer by determining that reverse transfer students were not necessarily enrolling in a community college because of failure at a baccalaureate degree granting institution. Rather, reverse transfer was defined as any community college student, full- or part-time, whose last work was at a

baccalaureate degree granting institution. It wasn't until 1982, however, that Renkiewicz et al. first identified post-baccalaureate reverse transfer students (called completer reverse transfers) as a unique subgroup of the community college student population. Since that time, post-baccalaureate reverse transfer students have been included in many studies of reverse transfer students (Berg, 1984; Boyd, 1983; Harris, 1998; Hogan, 1986; Jackson, 1991; Kajstura, 1989; Rooth, 1982; Ross, 1982; Steenhoek, 1984). Studies with a primary focus on post-baccalaureate reverse transfer students have been limited and have all been completed since 1990 (Delaney, 1995; Halvorson, 1998; Klepper, 1990; Lambert, 1994; Quinley & Quinley, 1998).

Klepper (1990) found that 24% of students enrolled in Piedmont Valley Community College in Virginia during the Fall 1989 Semester were PBRTS. The Maryland State Board of Community Colleges conducted a study which identified the percentage of PBRTS who entered Maryland community colleges in 1984. There was a range from 0.9% PBRTS at a small, rural community college to 23.5% PBRTS at a suburban community college. It must be noted that these numbers included all reverse transfer students, not only those with baccalaureate or higher degrees nor only those enrolled in credit programs (Lambert, 1994). Quinley and Quinley (1998) found that 7% of the credit population (with at least 15 credit hours completed) at Central Piedmont Community College were PBRTS. Halvorson (1998) found that 12% of the students had earned a baccalaureate or higher degree before enrolling in Minnesota technical colleges to continue their education. The present study found that the 2.1% of PBRTS enrolled in credit programs in the six Illinois community colleges surveyed was much lower than in

similar studies. The national average of PBRTS in both credit and non-credit programs was 7.8% of the entire community college population (Klepper, 1990).

Due to the inconsistencies in reporting of data, the accuracy of a national average of PBRTS is questionable. Records of students' educational backgrounds are not available in some instances. Some studies include PBRTS who are enrolled in non-credit courses while others include only those enrolled in credit courses. Some include both full- and part-time students while others include only full-time students.

The research literature showed that the typical post-baccalaureate reverse transfer student was male, over 40, and Caucasian. He was employed full time and attended the community college on a part-time basis. The typical student was enrolled in either technical or health-related programs (Delaney, 1995; Hogan, 1986; Kajstura, 1989; Lambert, 1994; Ross, 1982; Rothman, 1991; Slark, 1982; Steenhoek, 1984). The demographic and student status characteristics of students in this study were generally consistent with what other researchers reported in the literature. This study found slightly more males (51.4%) in the post-baccalaureate reverse transfer population. The average age of the PBRTS in the present study was 38.5 years and his ethnic origin was Caucasian. Most studies dealing with PBRTS found the majority of this population to be married. The present study's findings supported the research premise that 60.1% of PBRTS were married.

The full-time community college attendance status in the present study differed from the typical PBRTS described in the literature. Research found that most PBRTS attended the community college on a part-time basis while working full time. The present study showed that PBRTS both worked full time and attended school on a full-time basis.

The literature revealed that more PBRTS were enrolled in technical or health-related programs than in other programs. The present study found that more PBRTS were enrolled in computer-related programs than any other programs. The second highest number of PBRTS were enrolled in Health Services programs.

According to previous studies, the majority of PBRTS, contrary to expectations, earned baccalaureate degrees in career areas rather than liberal arts area. The distribution of four-year degrees by career versus liberal arts areas was about 60% to 40%, respectively (Quinley & Quinley, 1998). The typical PBRTS also had considerable work experience. The findings of the present study, however, indicated that the highest number of PBRTS (99 or 44.8%) had a baccalaureate degree in a liberal arts area. Work experience was not addressed in the present study; however, the average length of time between completion of a baccalaureate degree and enrollment in the community college degree or certificate program was 10.9 years. A conclusion may be drawn that the individual was employed during that interim period of time.

Studies conducted by Klepper (1990), Lambert (1994), and Delaney (1995) found that the most frequently cited reasons for PBRTS' enrollment in the community college were related to employment. The present study agreed with these findings. Three of the top four reasons that PBRTS enrolled in a community college degree or certificate program, "learn new skills"; "change job fields"; and "improve occupational status," were employment related.

A thorough search of the literature revealed that no studies of the reverse transfer or post-baccalaureate reverse transfer population addressed the utilization of career guidance resources. The present study was the first to examine PBRTS' use of career

guidance resources, both before entering college for the first time and before entering the most recent community college degree or certificate program. This study was also the first to examine the possibility of an association between the community college degree or certificate program in which the PBRTS was enrolled and specific demographic factors of PBRTS.

Conclusions

The following conclusions may be drawn based on the findings of this study and the review of literature:

Conclusions from Review of Literature

1. The American workforce is constantly changing. Advancing technology and the decline in the industrial workforce have led to shifts in occupational choices.
2. The workplace of the future will continually change, and the importance of lifelong learning will continue to grow. No education will last a lifetime. Career guidance, therefore, is essential to workers of all ages.
3. The shift from vocational guidance to career guidance has moved the focus to the entire adult population. Vocational guidance focused on individuals' entry into the labor market or re-entry after occupational dislocation. Career guidance focuses on the larger realm of people's lives, including interaction of vocational and personal aspects. Career guidance includes a longer time frame than occupational choice.
4. Special skills or training may be more important, in some types of high-wage employment, than a four-year college degree.

5. Occupational skills obtained through a community college degree or certificate program may be as valuable or more valuable than a four-year degree to ensuring economic security.

6. There have been many initiatives in the past decade to ensure that education includes workforce preparation.

7. A quality workforce is necessary to compete in the global economy.

8. Aging of the population in the United States will lead to an increased need for healthcare workers.

Conclusions from Findings

1. The typical post-baccalaureate reverse transfer student was a male Caucasian who was 38.5 years of age and married.

2. Post-baccalaureate reverse transfer students were typically employed full time and were somewhat satisfied or very satisfied with their employment situation.

3. The typical post-baccalaureate reverse transfer student was focused on college preparatory courses in high school, did not attend a community college before attending a four-year college or university, and his highest level of educational attainment was a baccalaureate degree.

4. Contrary to findings in the literature, post-baccalaureate reverse transfer students had baccalaureate degree majors in a liberal arts area more than in any other area.

5. After receiving a baccalaureate degree, the typical PBRTS waited 10.9 years before enrolling in a community college degree or certificate program. Generally, the student

attended full time and was enrolled in either a computer-related or health services-related program.

6. Individuals relied on career guidance information from friends and family members more than any other source both before entering college for the first time and before returning to a community college after obtaining a baccalaureate degree.

7. The importance of the Internet as a career guidance resource increased from the time PBRTS first enrolled in college to the time they enrolled in their most recent community college degree or certificate program. It can be assumed that this is due to the increase in the use of computers during the last decade.

8. Typically, post-baccalaureate reverse transfer students enrolled in a community college degree or certificate program for reasons related to employment.

9. More female post-baccalaureate reverse transfer students enrolled in Health Services programs at the community college while more male PBRTS enrolled in Appli d Technologies programs.

Recommendations

Recommendations for Practice

Based upon a review of the literature and the findings of this study, the following recommendations are offered:

1. A system for maintaining accurate, accessible data on post-baccalaureate reverse transfer students should be developed by the community colleges at either the local, state, or national level. Some institutions have the data readily available while others reported that such data were not accessible.

2. Consistency of reporting numbers of PBRTS needs to be addressed. Some institutions based percentages of PBRTS using the total student population; some based percentages of PBRTS on the reverse transfer population.

3. A clear and precise definition of post-baccalaureate reverse transfer students needs to be determined. Some studies include students who are enrolled in non-credit courses while others include only those enrolled in credit courses. Some specify that only those students who have earned a minimum of 15 credits may be included. Full- and part-time students are included in some studies, while others include only full-time students. Accuracy of data is questionable when there is such discrepancy among the criteria for determining which students should be included in the post-baccalaureate reverse transfer category. It is suggested that a post-baccalaureate reverse transfer student be defined as a full- or part-time community college student, enrolled in a degree or certificate program, who has a baccalaureate or higher degree.

4. Consistency in reporting---some PBRTS include those enrolled in both credit and non-credit programs. Some are called completer reverse transfers and may include those whose highest level of completion is an associate degree.

5. Lack of research on the PBRTS population may be due to difficulty in identification of this unique group. Many studies included narratives of how the admissions and registrars' offices at various institutions did not have adequate data regarding educational background of the students. Kajstura (1989) could get only 10 community colleges in Illinois to participate in his study due to the lack of records regarding "previous degrees."

6. Career guidance resources should be made more available or accessible through high school guidance offices before students make a choice to enroll in a specific baccalaureate degree.

7. High school counselors should be well-informed of the projected job market and employment opportunities.

8. Career information models should be developed beginning in the elementary grades and continuing through high school. The students should first be introduced to the generalities of work and their own attitudes toward work. They should then be given the opportunity to explore major occupational groups. At the beginning of high school, the student should begin selecting an occupational group for further exploration and ultimately select a specific occupation within the broader group. The student should then have the opportunity to observe people in the workplace or do job shadowing. These experiences should aid students in making the initial choice of career interest area before entering college.

9. At the high school level, career awareness programs should be offered annually or semi-annually for the students and their families. Since the findings of this research show that students rely on family and friends for career information more than any other resource, it is important that this information be made available to this influential group.

10. College/university career or placement centers should place more emphasis on career counseling. Freshman students should be required to participate in an orientation, which would include career guidance information and an opportunity to participate in a computerized occupational assessment such as SIGI Plus.

Recommendations for Further Research

1. Additional research should be conducted on the post-baccalaureate reverse transfer student population. This growing segment of the community college population brings with it a unique set of needs. To provide community colleges information so that these needs may be accommodated, additional research is necessary.

2. The literature revealed that reverse transfer students who did not hold baccalaureate degrees were quite different from post-baccalaureate reverse transfer students. It is important that these populations be studied separately. Kajstura (1989), Klepper (1990), Lambert (1994), Delaney (1995) and Quinley & Quinley (1998) have all called for a national study of the post-baccalaureate reverse transfer student population.

3. Since this research was the first to investigate post-baccalaureate transfer students' use of career guidance resources, additional research should be conducted in this area.

4. In drafting a survey instrument identifying reasons PBRTS' enrolling in a community college degree or certificate program, an obvious omission in this research was family status. "Change in family status" should be included in the list of reasons for enrollment in a community college program.

REFERENCES

Anderson, D. J. (1983). Reverse transfer students at the Community College of Denver: An analysis of selected characteristics and implications for student development programs and services [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 8305227

Berg, G. N. (1984). The reverse transfer, lateral transfer, and first-time community college student: A comparative study [CD-ROM]. Abstract from: Dissertation Abstracts International: Dissertation Abstracts Item: AA10553699

Berkin, C., Miller, C. L., Cherny, R. W., & Gormly, J. L. (1995). Making America: A history of the United States (vol. II: Since 1865). Boston: Houghton Mifflin Company.

Best, J. W., & Kahn, J. V. (1998). Research in education. (7th ed.). Needham Heights, MA: A Viacom Company.

Boyd, E. L. (1983). Reverse transfers: An emerging curriculum student in the North Carolina Community College system [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 8318929

Brown, B. L. (1998). What's happening in school-to-work programs? (Digest No. 190). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. Retrieved October 21, 1998 from the World Wide Web: http://ericacve.org/docs/dig 190. htm

Brown, K. W. (1986). Action research in business education. Business Education Forum, 40(5), 31-33.

Clark, B. R. (1960). The open door college: A case study. New York: McGraw-Hill.

Cross, K. P. (1988). New images for adult education. Community Services Catalyst, 18(3), 4-5.

Delaney, M. A. (1995). Reverse registrants in community colleges [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9620563

Dietz, M. (1998). A profile of freshmen students to the College of Technology at Ferris State University for the fall of 1995 and their subsequent academic progress. Unpublished master's thesis, Ferris State University, Big Rapids, MI.

Dykman, A. (1995). One-stop shopping. Vocational Education Journal, 70(8), 34-38, 68.

Eck, A. (1993). Job-related education and training: Their impact on earnings. Monthly Labor Review, 116(10), 21-38. Washington, DC: U.S. Department of Labor.

Employment and Training Administration. (1998). Workforce Investment Act. Washington, DC: U.S. Department of Labor.

Fink, A. (1995). How to sample in surveys. Thousand Oaks, CA: Sage Publications.

Fuller, T. (1987). A comparison of the study habits and attitudes of samples of reverse transfer students and native students enrolled in a community college [CD-ROM]. Abstract from: Dissertation Abstracts International: Dissertation Abstracts Item: AA18713643

Futrell, M. H. (1989). Mission not accomplished: Education reform in retrospect. Phi Delta Kappan, 70(9), 9-14.

Gallup Organization. (1987). Career development survey. Conducted for National Career Development Association. Princeton, NJ: Author.

Ginzberg, E. (1975). The manpower connection. Cambridge, MA: Harvard University Press.

Ginzberg, E. (1979). Good jobs, bad jobs, no jobs. Cambridge, MA: Harvard University Press.

Gose, B. (1997). A community college in Virginia attracts Ph.D.'s—as students. The Chronicle of Higher Education, 43(44), A33.

Gray, K. C., & Herr, E. L. (1995). Other ways to win: Creating alternatives for high school graduates. Thousand Oaks, CA: Corwin Press, Inc.

Grubb, W. N., & Lazerson, M. (1982). Education and the labor market: Recycling the youth problem. In H. Kantor & D. B. Tyack (Eds.), Work, youth,and schooling (pp. 110-141). Stanford, CA: Stanford University Press.

Grubb, W. N. (1999). The economic benefits of subbaccalaureate education: Results from national studies (CCRC Brief No. 2). New York: Teachers College, Columbia University, Community College Research Center.

Halvorson, K. J. (1998). A degree later: An analysis of the reverse transfer phenomenon of baccalaureate degreed students attending Minnesota's technical colleges [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9800950

Hansen, L. S. (1981). New goals and strategies for vocational guidance and counseling. International Journal for the Advancement of Counseling, 4(1), 21-34.

Harris, Michael R. (1998). Reverse transfers in the Kentucky Community College System [CD-ROM]. Abstract from: Dissertation Abstracts International: Dissertation Abstracts Item: ADG 9831573

Hecker, D. E. (1992, July). Reconciling conflicting data on jobs for college graduates. Monthly Labor Review, 115(7), 3-12. Washington, DC: U.S. Department of Labor.

Heinze, M. C., & Daniels, J. L. (1970). The transfer of students into community colleges. (ERIC Document Reproduction Service No. ED 050 725).

Herr, E. L., & Cramer, S. H. (1992). Career guidance and counseling through the lifespan: Systematic approaches (4th ed.). New York: HarperCollins Publishers Inc.

Hill-Brown, H. A. (1990). An institutional case study of reverse transfer students [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9024174

Hodson, R., & Sullivan, T. A. (1995). The social organization of work (2nd ed.). Belmont, CA: Wadsworth Publishing Company.

Hogan, R. R. (1986). An update on reverse transfers to two-year colleges. Community/Junior College Quarterly of Research and Practice, 10(4), 295-306.

Hoyt, K. B., & Lester, J. N. (1995). Learning to work: The NCDA Gallup survey. Alexandria, VA: National Career Development Association

Hudak, E. M. (1983). The reverse transfer student: An emerging influence on the community/junior college campuses [CD-ROM]. Abstract from: Dissertation Abstracts International: Dissertation Abstracts Item: AAI 8324480

Imel, S. (1996). One-stop career centers. (Trends and Issues Alert). Columbus, OH: ERIC Clearinghouse for Adult, Career, and Vocational Education. Retrieved October 21, 1998 from the World Wide Web: http://ericacve.org/docs/one-stop.htm

Jackson, C. J. (1991). Reverse transfer students: Students who transfer from area universities to the junior college [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9105032

Jennings, P. (1999, January 5). Job trends for the millennium. World News Tonight. New York: American Broadcasting Company. Retrieved January 7, 1999 from the World Wide Web: http://abcnews.go.com/onair/worldnewstonight/transcripts/wnt_990105_jobs_trans.html

Jones, R. T. (1987-88). Influence beyond the college gates. Community, Technical, and Junior College Journal, 58(3), 20-23.

Judy, R. W., & D'Amico, C. (1997). Workforce 2020: Work and workers in the 21st Century. Indianapolis, IN: Hudson Institute.

Kajstura, A. (1989). Reverse transfer students in Illinois community colleges [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9022793

Klepper, D. F. (1990). A descriptive analysis of completer reverse transfer students at a Virginia community college [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9112051

Lambert, R. J. (1994). College-wise: Post baccalaureate reverse transfer students attending Baltimore community colleges [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC9407654

Lee, G. (1975). Reverse transfer: The retread function of community colleges. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC. (ERIC Document Reproduction Service No. ED 104 471).

Lewis, M. (1997). Characteristics of successful school-to-work initiatives (Information Series No. 370). Columbus, OH: ERIC Clearinghouse of Adult, Career, and Vocational Education.

Martinko, A. (1978, October). Success of transfer students in Pennsylvania. Harrisburg, PA: Pennsylvania State Department of Education.

McFarlane, L. (n.d.). Why can't we get out in two years? El Vaquero Special Report, pp. 2-3. Retrieved November 22, 1999 from the World Wide Web: http://www.english.glendale.cc.ca.us/specrep.html

Merriam-Webster. (n.d.). WWWebster Dictionary. Retrieved December 7, 1999 from the World Wide Web: http://www.m-w.com/

National Library of Education. (1999). College for All? U.S. Department of Education, Office of Educational Research and Improvement. (Research Synthesis)

National Occupational Information Coordinating Committee. (1990, January 11). Almost two-thirds of Americans would seek more information about career options if they had it to do over again, new survey finds. Press Release. Washington, DC: Author.

National School-to-Work Learning and Information Center. (1996). Dispelling myths about school-to-work. Retrieved December 7, 1999 from the World Wide Web: http://www.stw.ed.gov/factsht/fact7.htm

O'Toole, J. (1977). Work, learning, and the American future. San Francisco: Jossey-Bass.

Quinley, J., W. & Quinley, M. P. (1997). Four-year graduates attending community colleges as serious credit students. New York: Community College Research Center, Teachers College, Columbia University.

Quinley, J. W., & Quinley, M. P. (1998). Four-year graduates attending community colleges: A new meaning to the term "second chance." Community College Research Center, Teachers College, Columbia University. Retrieved December 6, 1999 from the World Wide Web: http://www.tc.columbia.edu/~iee/ccrc/PROJECTS/ Jquinley.htm

Renkiewicz, N. K., Hirsch, P. M., Drummond, M. E., & Mitchell, G. N. (1982). The reverse transfer student: An emerging population. Preliminary draft report; field review edition. Sacramento, CA: American River College. (ERIC Document Reproduction Service No. ED 223 308)

Rooth, S. R. (1982). The reverse transfer student: An advantaged group returns to postsecondary education [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item AAC 8216458

Rosengarten, W. (1936). Choosing your life work (3rd ed.) New York: McGraw-Hill.

Ross, R.A. (1982). The reverse transfer phenomenon at Piedmont Virginia Community College, Fall Quarter, 1981 (Report No. 3-82). (ERIC Document Reproduction Service No. ED 216 758)

Rothman, W. J. (1991). A study of reverse transfer students at selected Ohio technical colleges [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9134255

Secretary's Commission on Achieving Necessary Skills (SCANS). (1991) SCANS Report. Washington, D.C.: U.S. Department of Labor.

School-to-Work Opportunities Act, Overview. (1994). Alexandria, VA: American Vocational Association.

Slark, J. (1982). Reverse transfer student study (ERIC Document Reproduction Service No. ED 221 248)

Steenhoek, A. C. (1984). The reverse transfer student and comparisons of the reverse transfer student to the lateral transfer student, and the native student at Cerritos College [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 8521257

Stern, M. (1992, June 29). Employer survey. Adult and Continuing Education Today, 22(2), 1.

Summary of the Goals 2000 Act. (1994, March 31). Vocational Education Weekly, 3-4. PL 103-227.

Super, D. E. (1951). Vocational adjustment: Implementing a self-concept. Occupations, 30, 88-92.

Super, D. E. (1969). Vocational development theory: Persons, positions, and processes. The Counseling Psychologist, 1, 2-9.

Swedler, J. (1981). A study of reverse transfers who entered Northern Illinois University during 1975-1976: An analysis of their academic progress [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 8003315

Tuckman, B. W. (1994). Conducting educational research (4th ed.). Fort Worth, TX: Harcourt Brace & Company.

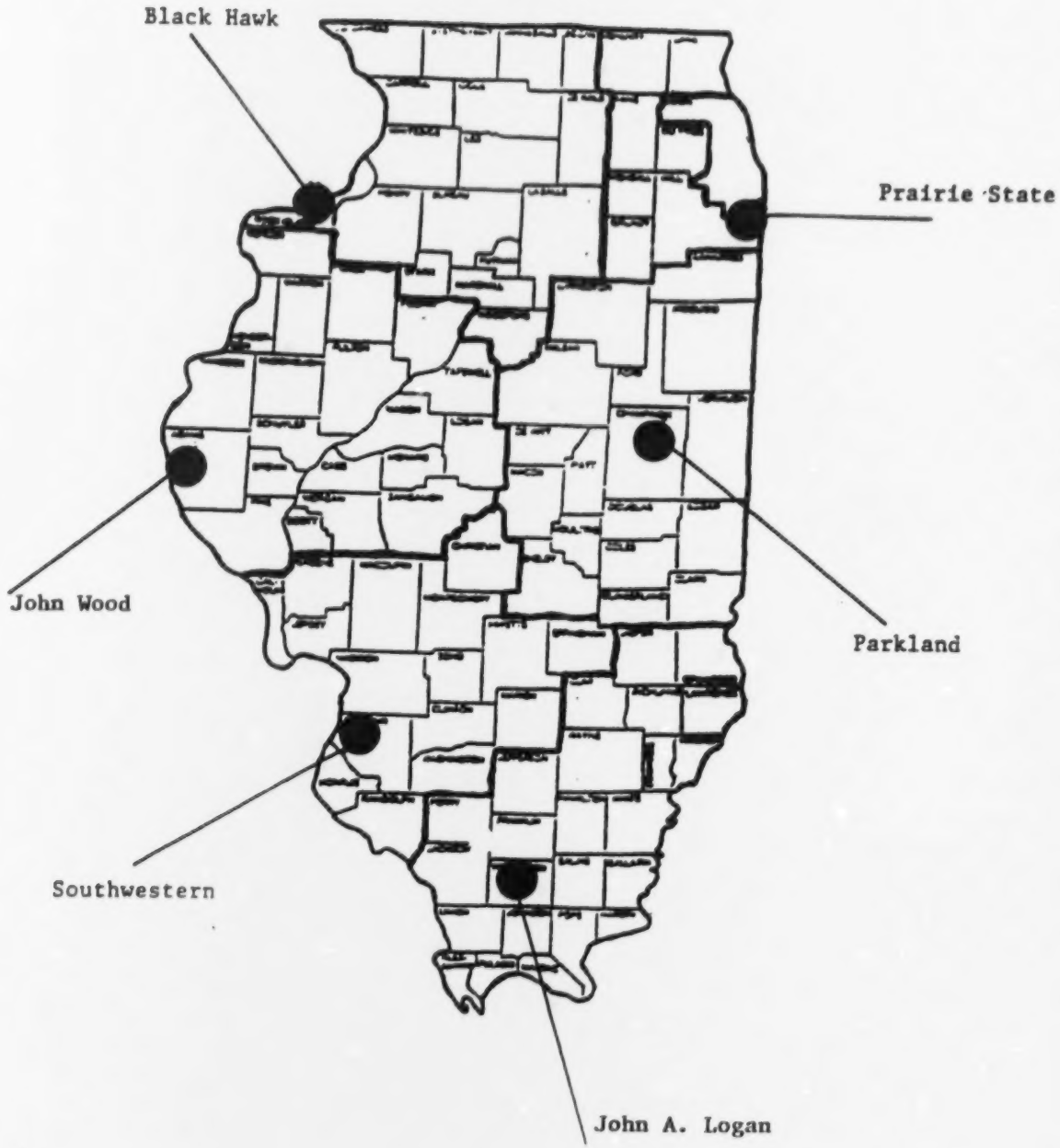
United States Department of Labor. (1987). Workforce 2000: Work and workers for the 21st Century. Washington, DC: Hudson Institute.

United States Information Agency (USIA). (1991). A historical perspective on the American economy: The post-war economy. An Outline of the American Economy (1991). Retrieved November 20, 1998 from the World Wide Web: http://odur.let.rug.nl/%7Eusa/ECO/1991/ch3_p12.htm

APPENDICES

APPENDIX A

Map of Education Regions in Illinois



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APPENDIX B

Approval for Use of Survey Instrument

Subject: RE: Survey Instrument
Date: Mon, 22 Nov 1999 13:09:23 -0500
From: "Donna Klepper" <dfk2d@jade.pvcc.cc.va.us>
To: "Dianna Reusch" <dreusch@siu.edu>

Dianna- I have been out of town for training over the last week, so I need to start off with an apology. Yes, please feel free to use the survey instrument. The survey development is discussed on pp.66-67 and was modeled after an existing survey. It was field tested for reliability and content validity at Piedmont Virginia community College prior to its administration. Good luck in your doctoral dissertation pursuits, and know that it can be done! Best wishes. Donna

> *-----Original Message-----*
> *From: Dianna Reusch [mailto:dreusch@siu.edu]*
> *Sent: Monday, November 15, 1999 12:48 PM*
> *To: dfk2d@pvcc.cc.va.us*
> *Subject: Survey Instrument*
>
>
> *Dr. Klepper,*
>
> *I am a doctoral candidate at Southern Illinois University, Department of Workforce Education and Development, currently working on my research prospectus. My area of interest is post-baccalaureate reverse transfer students (completer reverse transfers) and their use of career guidance opportunities. I will survey students at selected Illinois community colleges.*
>
> *I would like permission to use your survey instrument, making revisions and additions to fit my needs.*
>
> *I have also read Michael Harris's dissertation (1997), in which he states that he used (with your permission) parts of your survey. He mentioned that he had obtained permission from the original source--CACC--also. Is that necessary?*
>
> *One more thing--do you have validity and reliability data on the survey?*
>
> *Thank you for any help/input you may be able to provide. I loved reading your dissertation and found it very helpful.*
>
> *Dianna Reusch*
> *Conference Coordinator*
> *Division of Continuing Education*
> *Southern Illinois University*
> *Carbondale, IL 62901*
> *(618) 453-5672*
>
>

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APPENDIX C

Request for Approval of Research Activities Involving Human Subjects

SIUC HSC FORM A

REQUEST FOR APPROVAL OF RESEARCH ACTIVITIES INVOLVING HUMAN SUBJECTS

This approval is valid for one (1) year from the approval date. Researchers must request a renewal to continue the research after that date. This approval form must be included in all Master's theses/research papers and Doctoral dissertations involving human subjects to be submitted to the Graduate School

PROJECT TITLE: The Nature and Characteristics of Post-Baccalaureate Reverse Transfer Students and Their Utilization of Career Guidance

CERTIFICATION STATEMENT:

In making this application, I(we) certify that I(we) have read and understand the University's policies and procedures governing research activities involving human subjects, and that I(we) shall comply with the letter and spirit of those policies. I(we) further acknowledge my(our) obligation to (1) accept responsibility for the research described, including work by students under my(our) direction, (2) obtain written approval from the Human Subjects Committee of any changes from the originally approved protocol **BEFORE** making those changes, (3) retain signed informed consent forms, in a secure location separate from the data, for at least **three** years after the completion of the research, and (4) report immediately all adverse effects of the study on the subjects to the Chairperson of the Human Subjects Committee, Carbondale, Illinois, (618) 453-4543, and to the Director of the Office of Research Development and Administration, Southern Illinois University at Carbondale, (618) 453-4531.

Dianna Reusch — 12/16/99

Dianna Reusch
RESEARCHER(S) or PROJECT DIRECTORS — DATE
Please print or type out name below signature

Marcia A. Anderson — 12/16/99

Marcia A. Anderson
RESEARCHER'S ADVISOR (required for all student projects) — DATE
Please print or type out name below signature

The request submitted by the above researcher(s) was approved by the SIUC Human Subjects Committee.

Robert C. Koehler — 1-5-00

CHAIRPERSON, SOUTHERN ILLINOIS UNIVERSITY HUMAN SUBJECTS COMMITTEE — DATE

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APPENDIX D

Cover Letter Explaining Pilot Testing Procedure

January 14, 2000

REQUEST FOR ASSISTANCE WITH PILOT STUDY

As a doctoral student at Southern Illinois University Carbondale, I am conducting a research project designed to gather information about students who are enrolled in a community college degree or certificate program and already hold a baccalaureate or higher degree (post-baccalaureate reverse transfer students).

Before conducting my study, I would like your input. A copy of my survey and cover letter are enclosed for your examination. Please read the cover letter and complete the survey then answer the questions on the blue questionnaire. Return the questionnaire, survey, and cover letter to me. A self-addressed, stamped envelope is enclosed for your convenience.

The project has been reviewed and approved by the Carbondale Committee for Research Involving Human Subjects. The Committee believes that the research procedure adequately safeguards the subject's privacy, welfare, civil liberties, and rights. As a participant in this pilot study, your identity will remain anonymous. Completion and return of these documents indicate voluntary consent to participate in the study.
If you have any questions concerning your rights as a participant in this pilot study, contact the chairperson of the committee, Office of Research Development and Administration, Southern Illinois University Carbondale at (618) 453-4533.

Please complete and return the survey, cover letter, and blue questionnaire to me by January 28, 2000. If you have any questions, please contact me during the day at (618) 453-5672 or in the evening at (618) 529-2373 or my advisor, Dr. Marcia Anderson at (618) 453-1960.

Thank you for your help with my pilot study.

Sincerely yours,

Dianna Reusch

Enclosures

APPENDIX E

Pilot Test Checklist

Pilot Study Questionnaire

How long did it take to complete the survey?

Were any items on the survey unclear? If so, which ones?

Were the directions clear? Did you have any questions about what you were supposed to do?

Was the cover letter interesting? Based on the information in the cover letter, would you be persuaded to respond to the survey?

Is the format and layout of the survey pleasing?

Do you have any suggestions for improving the survey or the cover letter?

THANK YOU FOR YOUR HELP!

APPENDIX F

Survey Instrument

COMMUNITY COLLEGE STUDENT SURVEY

Please answer the following questions as accurately as possible, checking the appropriate answer unless otherwise indicated. Thank you for your time.

I. Were you enrolled in an associate degree or certificate program at the community college during the Fall 1999 semester?

_____ Yes _____ No

If yes, please complete this survey. If no, please return the survey in the enclosed envelope.

II. BACKGROUND INFORMATION

1. Age
   - _____ 20-29
   - _____ 30-39
   - _____ 40-49
   - _____ 50-59
   - _____ 60 & over

2. Marital Status
   - _____ Married
   - _____ Never Married
   - _____ Separated
   - _____ Divorced
   - _____ Widowed

3. Ethnic Origin
   - _____ Caucasian
   - _____ African American
   - _____ Native American
   - _____ Asian
   - _____ Hispanic
   - _____ Other (please specify)

4. Gender
   - _____ Female
   - _____ Male

5. What was your employment status during the Fall 1999 semester?
   _____ Employed full time _____ Employed part time _____ Unemployed _____ Retired

6. What job did you have when you decided to enroll in your most recent/current community college program?
   _____

7. What was the level of employment satisfaction with the job you held when you decided to enroll in your most recent/current community college program?
   _____ Very satisfied _____ Somewhat satisfied _____ Dissatisfied

III. EDUCATION INFORMATION

8. What was your high school focus?
   _____ College preparatory _____ Vocational _____ General
   _____ Other (please specify)_____

9. Did you attend a community college before enrolling in a 4-year college? _____ Yes _____ No

10. What degree(s) and/or certificate(s) have you completed? (Please mark all that apply--some examples are given in parentheses.)
    - _____ Associate's Degree (AA, AS, AAS)
    - _____ Bachelor's Degree (BA, BS)
    - _____ Master's Degree (MA, MS, MBA, MFA)
    - _____ Professional Degree (MD, DO, DDS, JD)
    - _____ Doctoral Degree (PhD, EdD)
    - _____ Other Certificate/License (please specify) _____

11. What was your bachelor's degree major?_____

12. In which associate degree or certificate program were you enrolled during the Fall 1999 semester? Please indicate name of program. (Examples: CNA, Computer Information Systems, Electronics Technology)
    _____

13. What was the length of time between completing your baccalaureate or higher degree and enrolling in your most recent/current community college degree or certificate program? _____

14. What was your student attendance status during the Fall 1999 semester? _____ Full-time _____ Part-time

IV. REASONS FOR ENROLLMENT IN YOUR MOST RECENT/CURRENT COMMUNITY COLLEGE PROGRAM

Listed below are reasons students give for enrolling in a community college degree or certificate program. Please indicate the importance of every reason that influenced you to enroll in your most recent/current program by circling the appropriate number.

	5 = Very Important	4 = Important	3 = Somewhat Important	2 = Not Important	1 = Not Applicable
a. Improve occupational status	5	4	3	2	1
b. Earn more money	5	4	3	2	1
c. Get training to get a job	5	4	3	2	1
d. Get training related to my current job	5	4	3	2	1
e. Dissatisfaction with current job	5	4	3	2	1
f. Learn new skills	5	4	3	2	1
g. Update existing skills	5	4	3	2	1
h. Move up in my current job	5	4	3	2	1
i. Prepare for license or exam	5	4	3	2	1
j. Change job fields	5	4	3	2	1
k. Prepare to transfer	5	4	3	2	1
l. Increase my self-confidence	5	4	3	2	1
m. Meet new people	5	4	3	2	1
n. Personal growth and interests	5	4	3	2	1
o. Required by employer	5	4	3	2	1

V. CAREER/JOB INFORMATION SOURCES UTILIZED BEFORE ATTENDING COLLEGE FOR THE **FIRST TIME**.

Did you use career/job information before attending college for the **FIRST TIME** (this may have been several years ago)? _____ Yes _____ No If yes, complete this section; if no, go to Section VI.

Listed below are sources for career/job information. When making the decision to attend college for the **first time**, which of the following sources did you use to obtain information about jobs or careers? Please indicate the importance of every source that you used by circling the appropriate number.

	5 = Very Important	4 = Important	3 = Somewhat Important	2 = Not Important	1 = Not Applicable
a. Library	5	4	3	2	1
b. Career information center	5	4	3	2	1
c. Public job service or job training program	5	4	3	2	1
d. Counselor	5	4	3	2	1
e. Teacher	5	4	3	2	1
f. College catalog/advertisement	5	4	3	2	1
g. Internet	5	4	3	2	1
h. Newspapers/magazines	5	4	3	2	1
i. Television/radio	5	4	3	2	1
j. Friend or family member	5	4	3	2	1

VI. CAREER/JOB INFORMATION SOURCES UTILIZED BEFORE ENROLLING IN **MOST RECENT/ CURRENT** COMMUNITY COLLEGE PROGRAM

Did you use career/job information before enrolling in your **MOST RECENT/CURRENT** community college program? _____ Yes _____ No If yes, complete this section; if no, you are finished.

Listed below are sources for career/job information. When making the decision to enroll in your most recent/ current community college program, which of the following sources did you use to obtain information about jobs or careers? Please indicate the importance of every source that you used by circling the appropriate number.

	5 = Very Important	4 = Important	3 = Somewhat Important	2 = Not Important	1 = Not Applicable
a. Library	5	4	3	2	1
b. Career information center	5	4	3	2	1
c. Public job service or job training program	5	4	3	2	1
d. Counselor	5	4	3	2	1
e. Teacher	5	4	3	2	1
f. College catalog/advertisement	5	4	3	2	1
g. Internet	5	4	3	2	1
h. Newspaper/magazine	5	4	3	2	1
i. Television/radio	5	4	3	2	1
j. Friend or family member	5	4	3	2	1

THANK YOU FOR PARTICIPATING

APPENDIX G

Cover Letter

February 21, 2000

REQUEST FOR RESEARCH ASSISTANCE

As a doctoral student in the Department of Workforce Education and Development at Southern Illinois University Carbondale, I am conducting a research project designed to gather information about post-baccalaureate reverse transfer students. These are students who are enrolled in a community college degree or certificate program and already hold a baccalaureate or higher degree. Please assist me with this project by taking 15 minutes to complete the enclosed survey and return it to me in the enclosed self-addressed, stamped envelope.

The identity of the survey participants will remain anonymous; the number on the survey instrument is to be used only as a coding device to determine which individuals have responded for purposes of a follow-up letter. The code, which identifies individuals for follow-up purposes, will be destroyed after completion of the survey. Completion and return of this survey indicates voluntary consent to participate in this study.

The project has been reviewed and approved by the Carbondale Committee for Research Involving Human Subjects. The Committee believes that the research procedure adequately safeguards the subject's privacy, welfare, civil liberties, and rights. If you have any questions concerning your rights as a participant in this research study, contact the chairperson of the Committee, Office of Research Development and Administration, Southern Illinois University Carbondale at (618) 453-4533.

Please complete and return the enclosed survey instrument to me by February 19, 2000. If you have any questions, please contact me at (618) 529-2373 or my doctoral program advisor, Dr. Marcia Anderson, at (618) 453-1960.

Thank you for helping with my research project.

Sincerely yours,

Dianna Reusch

Enclosures

APPENDIX H

Table of Chi-Square Tests of Association Between Community College Degree or Certificate Program and Selected Variables

Table 20

Chi-Square Tests of Association Between Community College Degree or Certificate Program and Selected Variables

Variables	Degrees of Freedom	Chi-Square	Significance	Cramer's V
Age	36	50.766	0.052	0.241
Marital Status	36	29.324	0.777	0.189
Ethnic Origin	36	32.606	0.631	0.199
Gender	9	49.806	0.001*	0.492
High School Focus	27	19.990	0.831	0.174

Note. * $p < .01$

APPENDIX I

Respondents' Unsolicited Comments

UNSOLICITED COMMENTS

Respondent 1

When I started college in 1968, I was planning to major in nursing. Because of health problems, I changed my major at the beginning of my junior year to English because it was a less stressful major for me. I went to work after graduation; however, nine months later my husband transferred to another job. I was hired in a new position as teacher aide/library aide. I enjoyed the work.

We decided to have a family and I stayed home with my children. This is something I really wanted to do. When my sons were in 7th grade and 5th grade, I decided to go back to teacher aide/library aide work. Because the school district reduced the number of aides, I lost my job. I took a job as a secretary and worked in that position for almost eight years, but I was extremely unhappy in that job. Last summer, I resigned that job. The stress in my secretarial job was affecting my health, and it was no longer worth the extra money.

I had very strong career goals when I started college in 1968, but life does not always take the path you have planned! It's hard for some people to understand why I have a degree but don't have a career! I have just started working again as a substitute teacher/library aide and hope for a permanent position soon.

Respondent 2

My situation is rather unusual. I resigned my position (of 10 years) as a letter carrier. I had decided life was too short to stay in a job which required more brawn than brains. I wanted to travel and reflect on my life. I enrolled in computer classes for

personal interest. I decided to seek an A.A.S. in Computer Information Systems. I am not employed for compensation.

Respondent 3

There was not much career counseling available in the late 60s/early 70s. The entire [public job service] system needs a great deal of improvement and elimination of unproductive programs. It needs to actually serve the tax payer--Imagine that! What a concept!

Respondent 4

Aptitude test was given in high school.

Respondent 5

There are not many opportunities for registered dieticians in this geographic area. Changing careers so that I can work at home. This field pays about one-half what an R.D. would earn. Working at home is the major and most important reason for changing.

VITA

Graduate School
Southern Illinois University

Dianna Lynn Reusch · Date of Birth: January 29, 1948

144 Blackhawk Drive, Carbondale, IL 62901

Western Michigan University, Kalamazoo
Bachelor of Science in Business Education, 1970

Southern Illinois University Carbondale
Master of Science in Education, 1996

Special Honors and Awards:

NBEA Award of Merit in Business Education

Illinois Business Education Association Writers' Hall of Fame

Illinois Council on Continuing Higher Education Research Award

Dissertation Title:

The Nature and Characteristics of Post-Baccalaureate Reverse Transfer Students and Their Utilization of Career Guidance

Major Professor: Marcia A. Anderson

Publications:

Reusch, D. L. (1996). Workplace Literacy Programs--Benefits Beyond the 3 Rs. Delta Pi Epsilon Perspectives.

Reusch, D. L. (1996). Barriers Adult Office Education Students Encounter in Pursuit of Their Educational Goals. Conference Proceedings.